

FIG.1

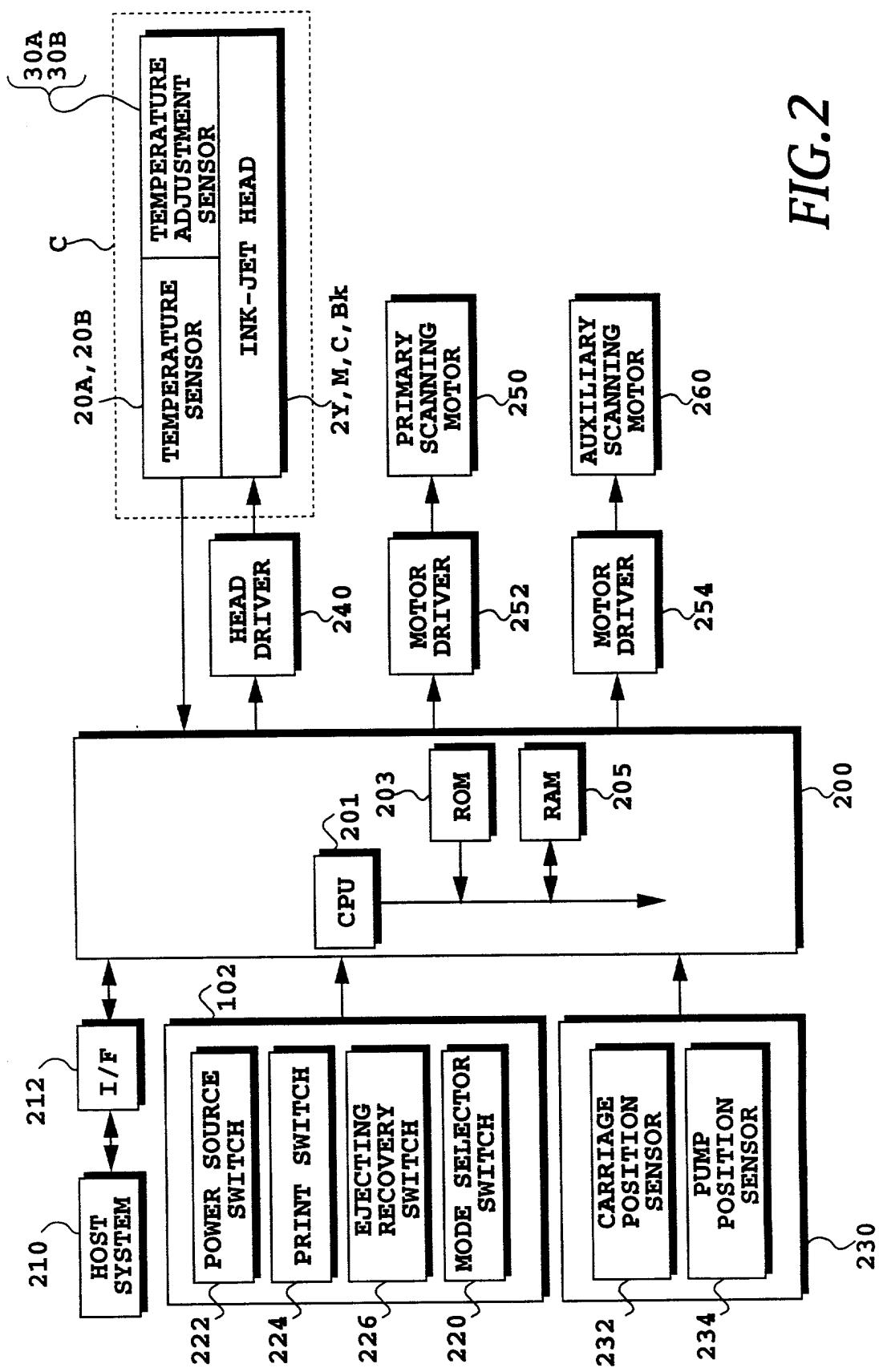


FIG.2

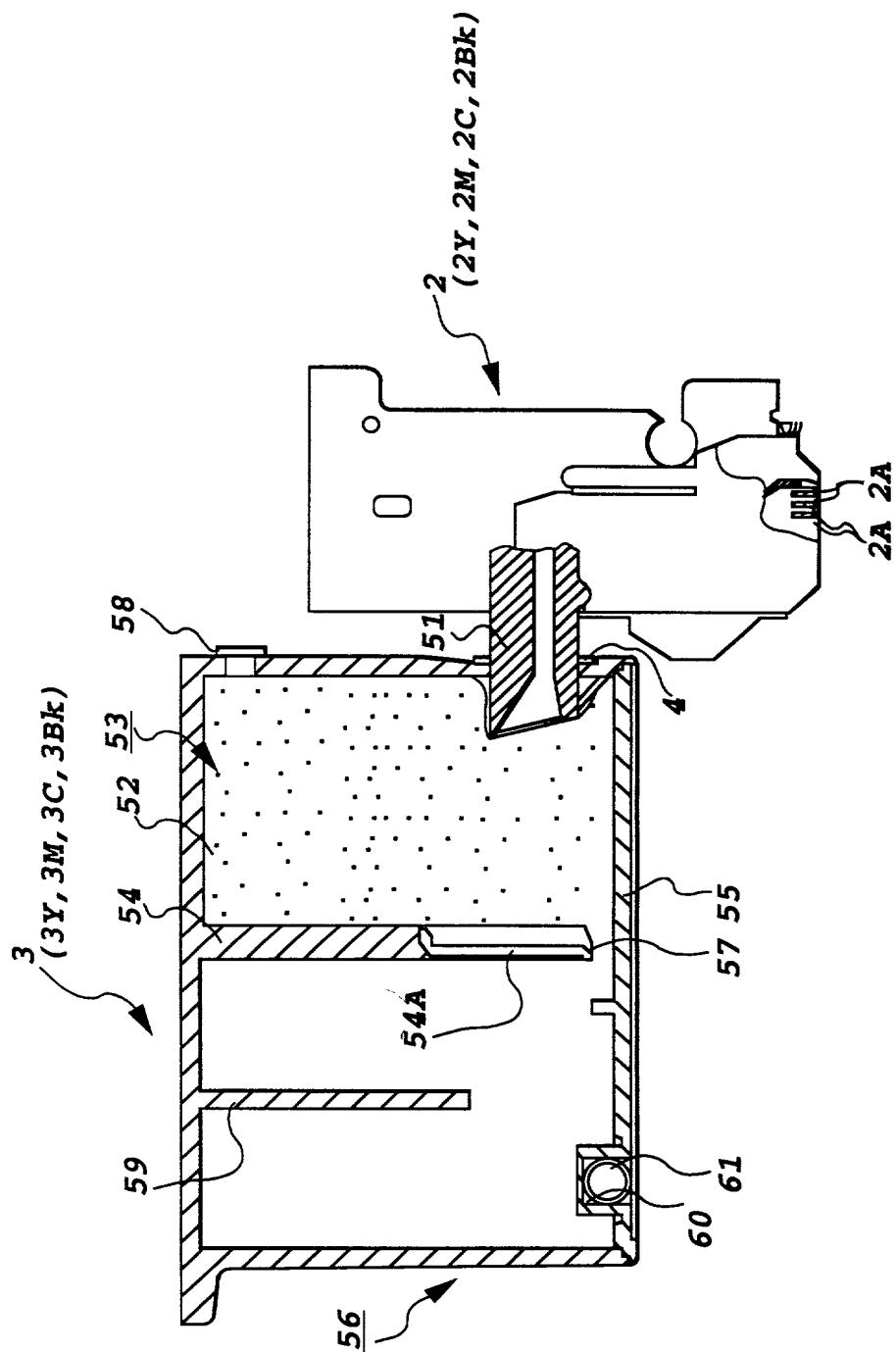


FIG. 3

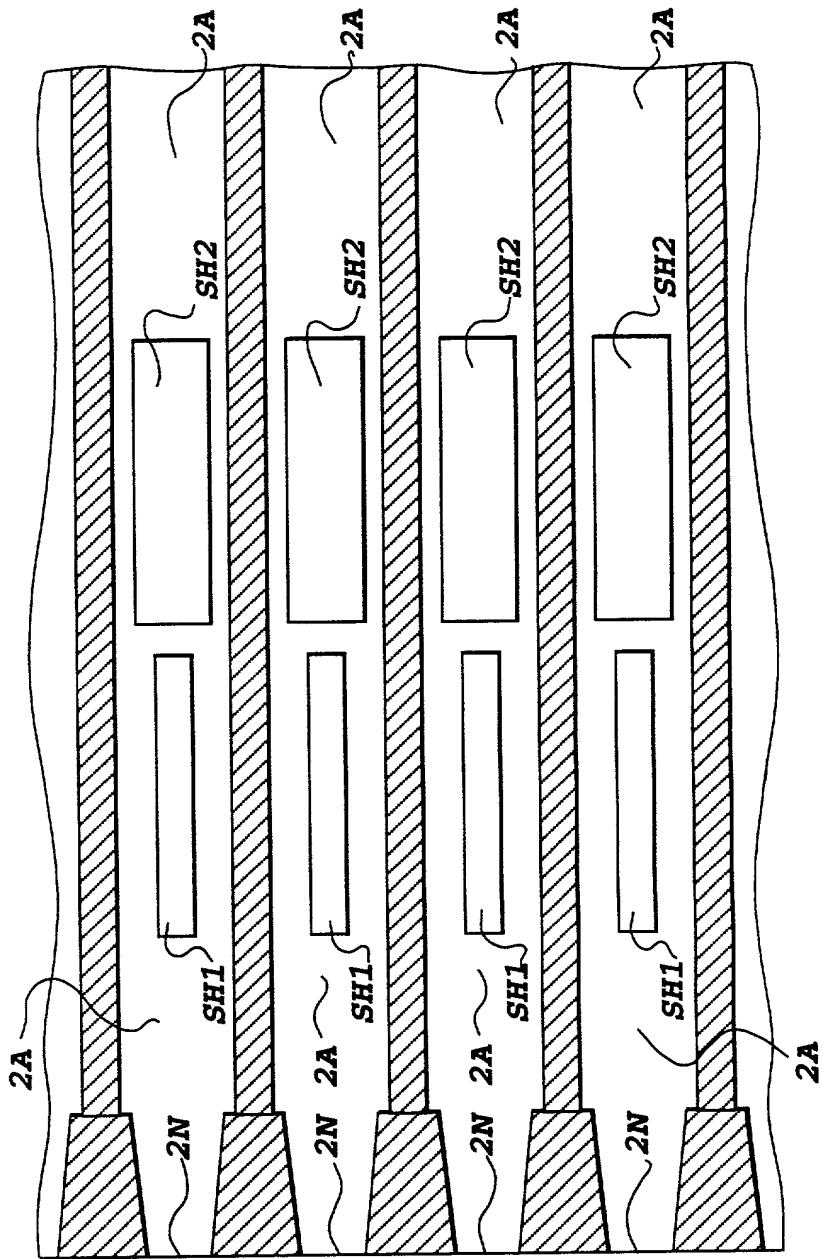


FIG. 4

FIG. 5

FIG. 5A

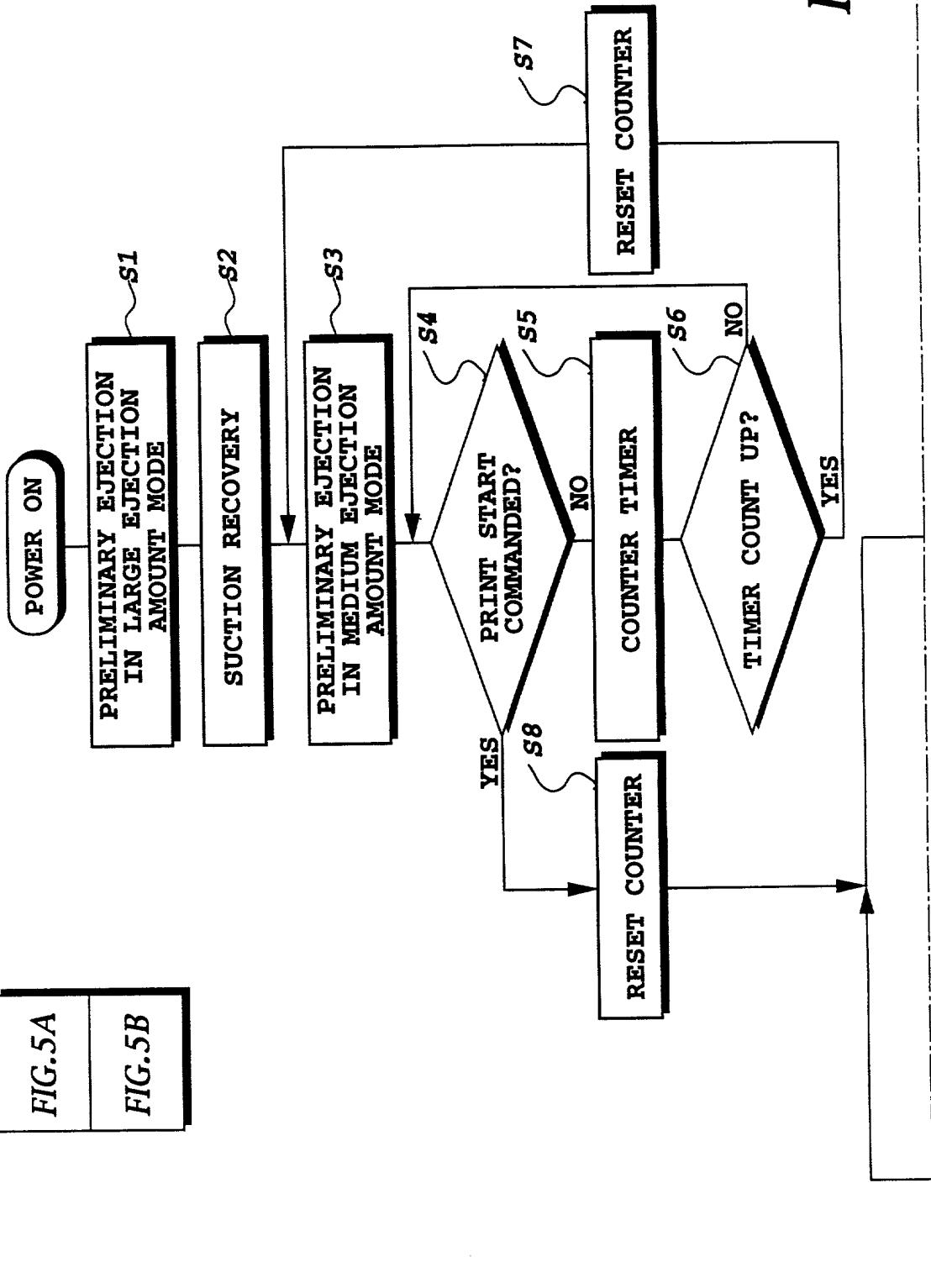


FIG. 5A

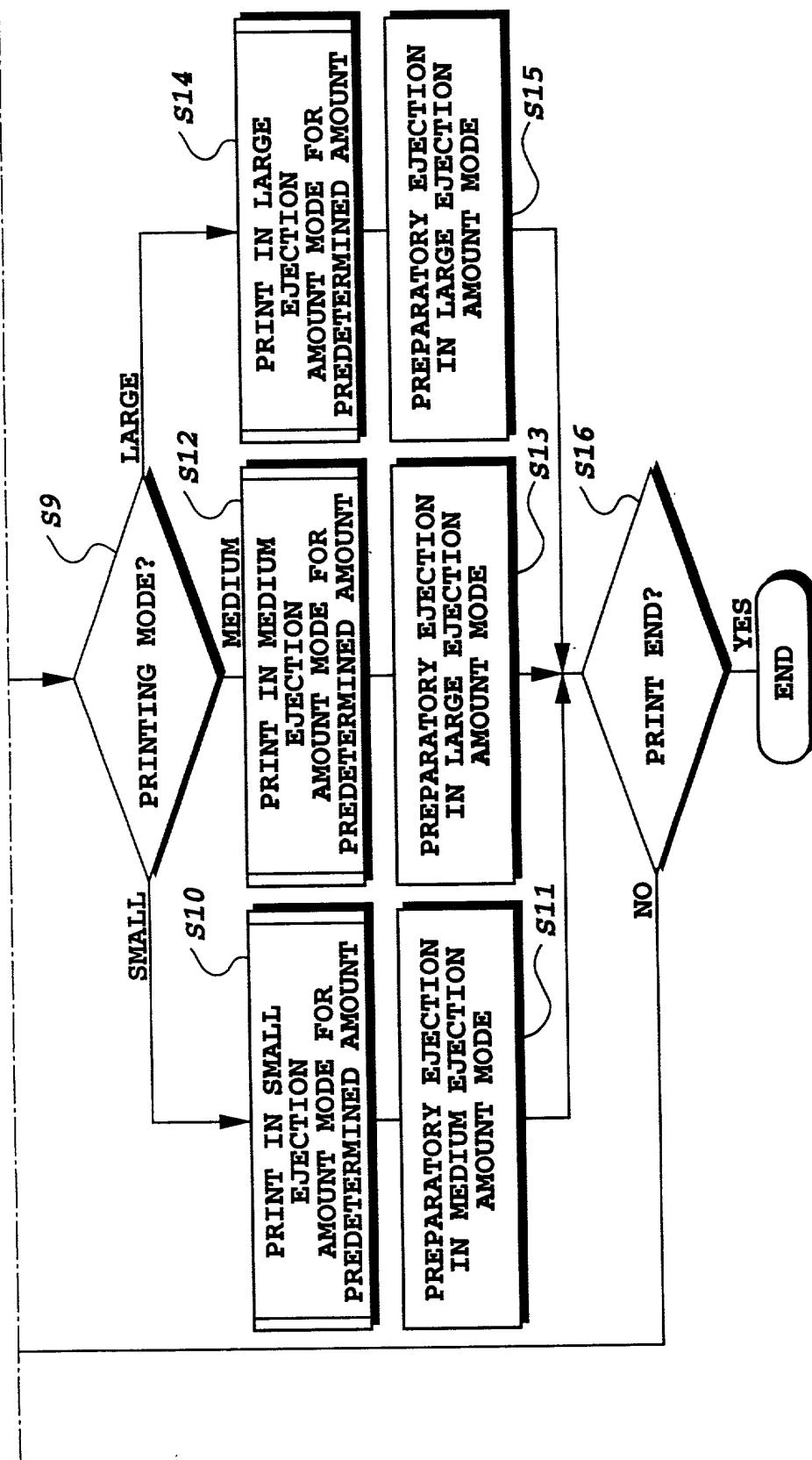


FIG5B

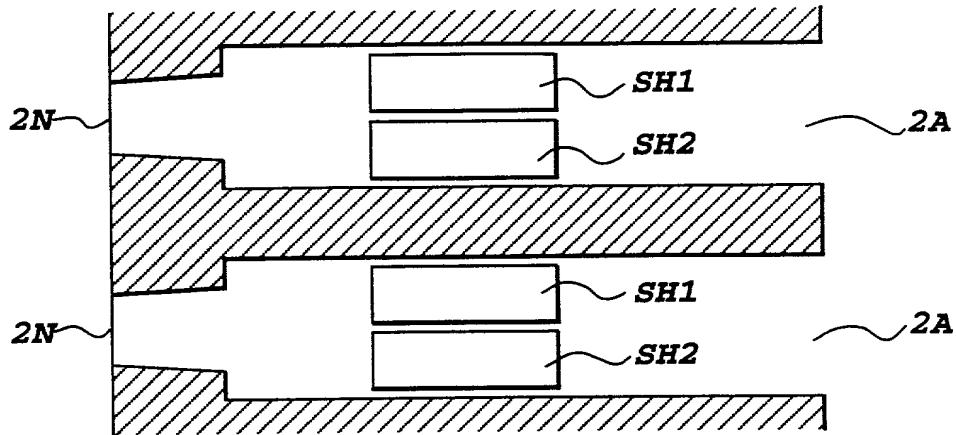
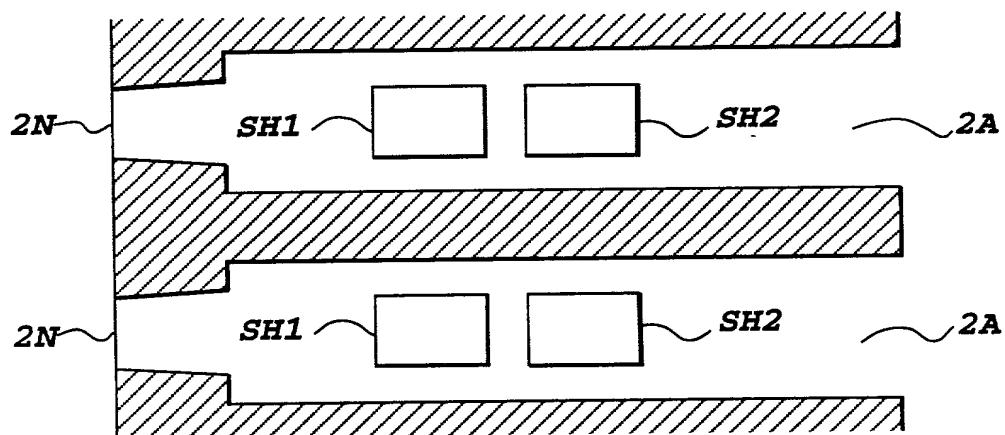
**FIG.6A****FIG.6B**

FIG. 7

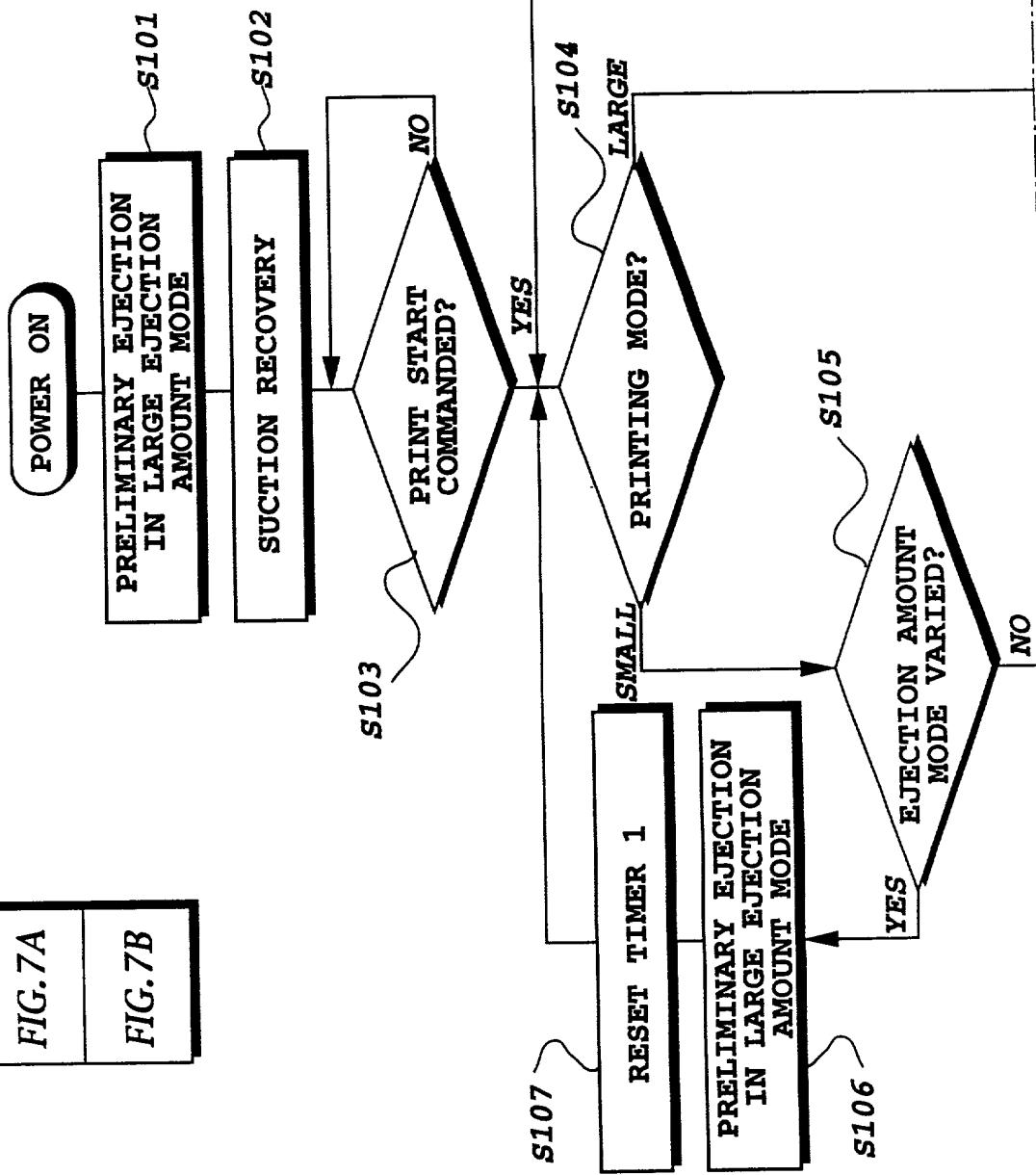


FIG. 7A

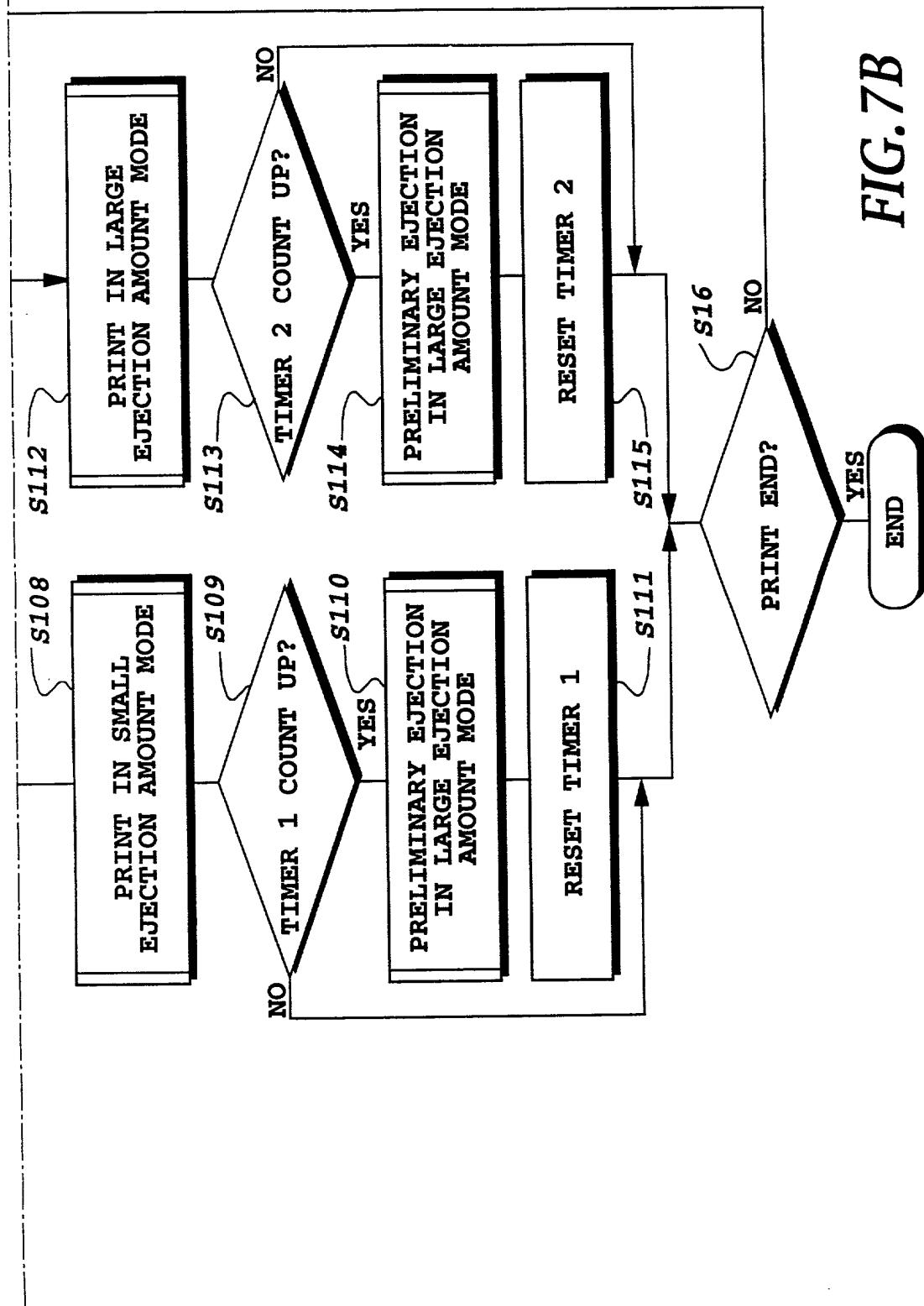
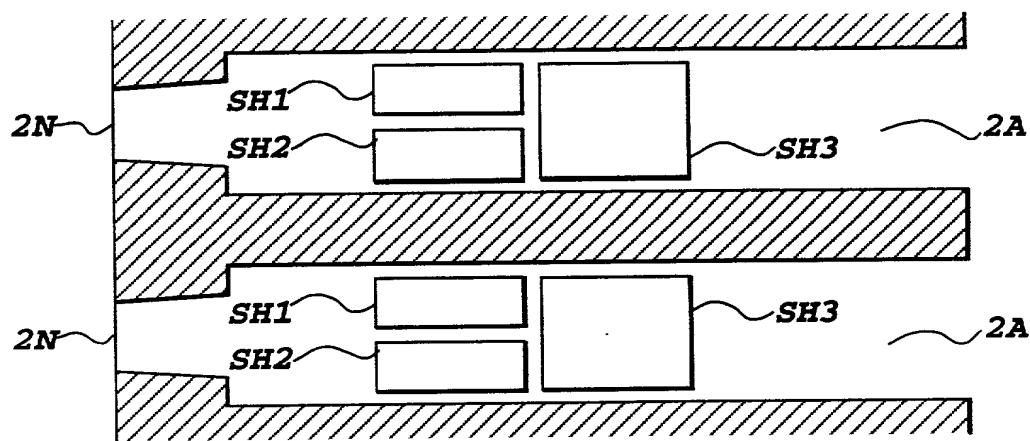
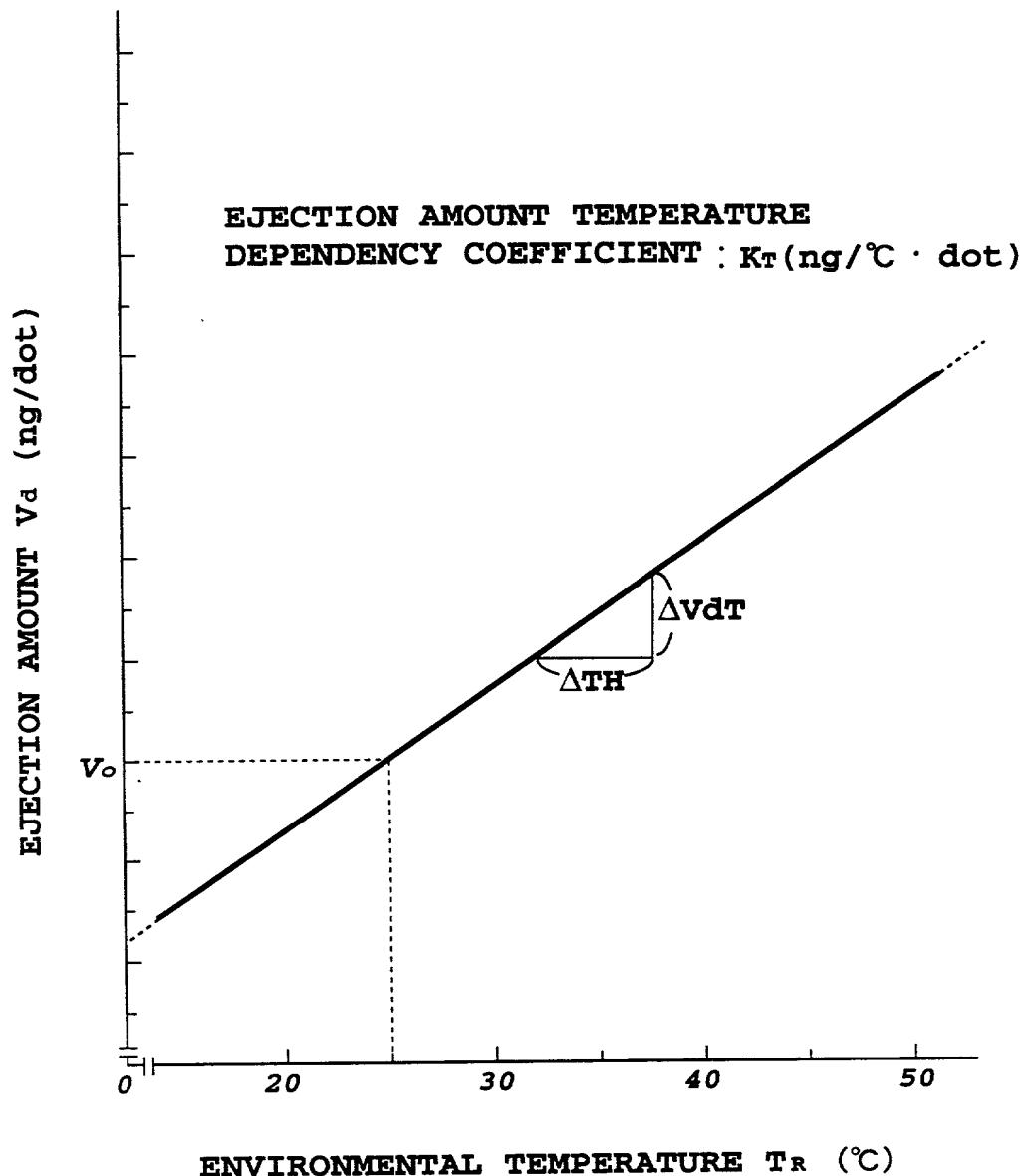


FIG.7B



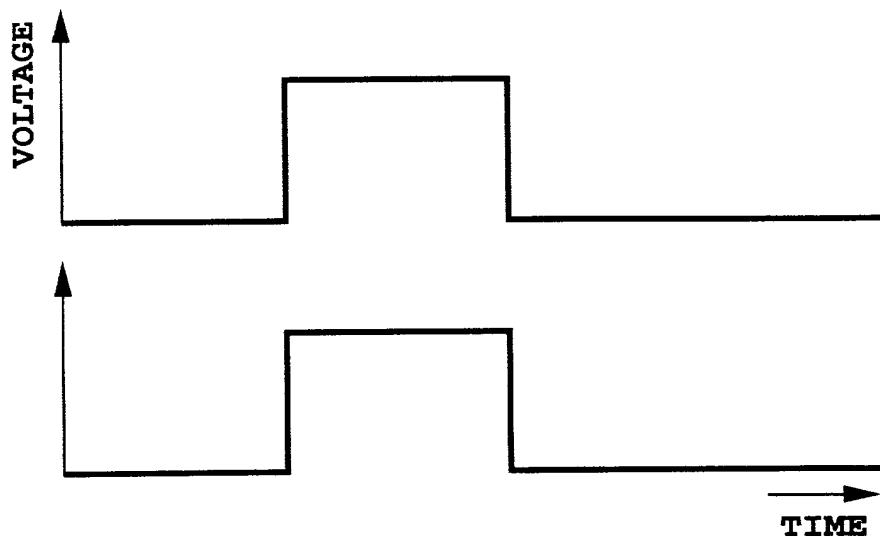
**FIG.8**

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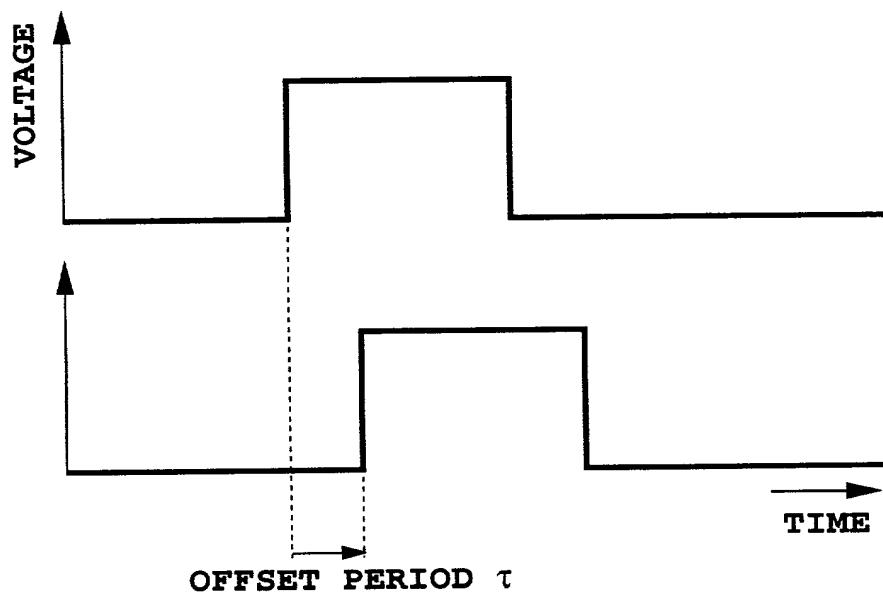


*FIG. 9*

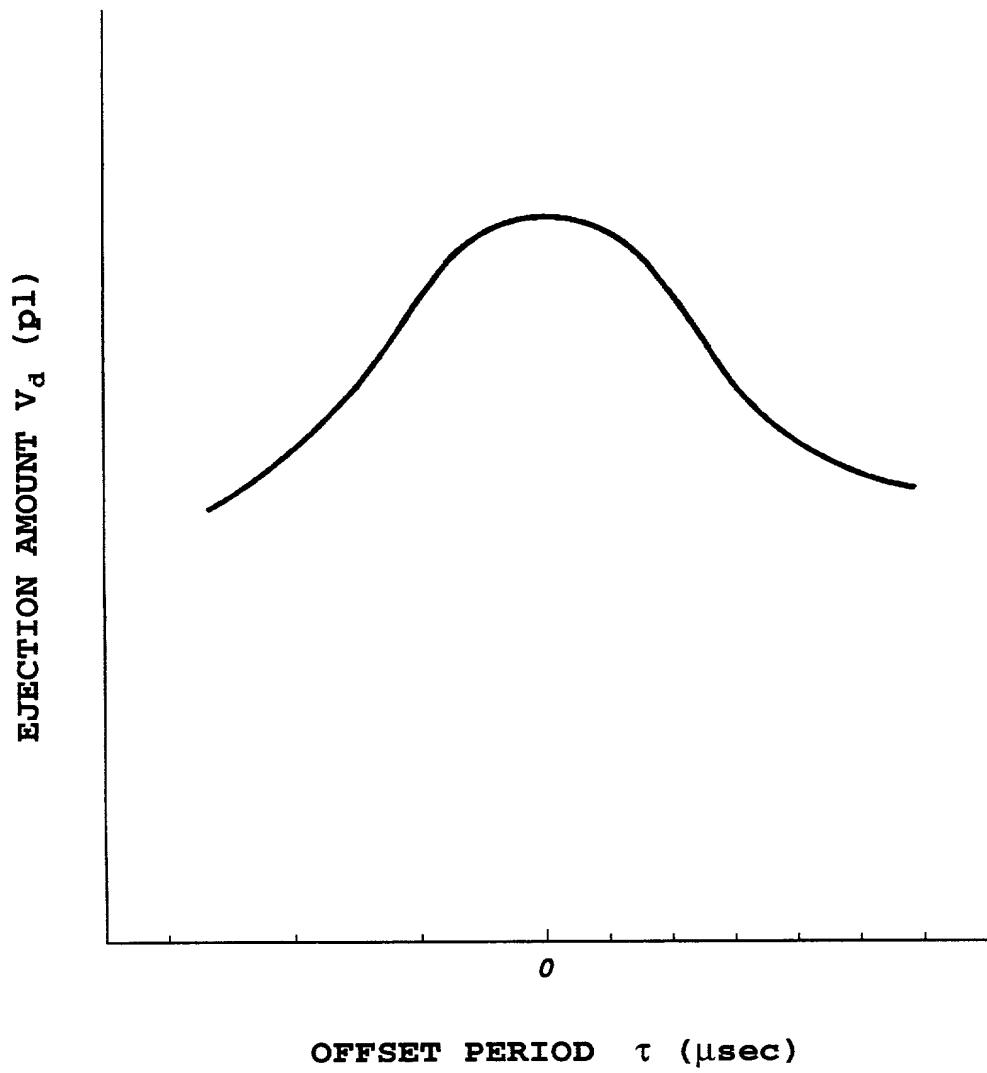
12/81



*FIG.10A*



*FIG.10B*



***FIG. 11***

| TABLE NO.                         | ①  | ②  | ③  | ④  | ⑤  | ⑥  | ⑦  | ⑧  | ⑨  | ⑩  | ⑪             |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|---------------|
| HEAD<br>TEMPERATURE<br>$T_h$ (°C) | 26 OR<br>MORE<br>~<br>LESS<br>THAN<br>26 | 29 OR<br>MORE<br>~<br>LESS<br>THAN<br>32 | 32 OR<br>MORE<br>~<br>LESS<br>THAN<br>35 | 35 OR<br>MORE<br>~<br>LESS<br>THAN<br>38 | 38 OR<br>MORE<br>~<br>LESS<br>THAN<br>41 | 41 OR<br>MORE<br>~<br>LESS<br>THAN<br>44 | 44 OR<br>MORE<br>~<br>LESS<br>THAN<br>47 | 47 OR<br>MORE<br>~<br>LESS<br>THAN<br>50 | 47 OR<br>MORE<br>~<br>LESS<br>THAN<br>53 | 50 OR<br>MORE<br>~<br>LESS<br>THAN<br>53 | 53 OR<br>MORE |
| OFFSET<br>PERIOD<br>$\tau$ (μsec) | 0  | 0.8                                      | 1.2                                      | 1.5                                      | 1.8                                      | 2.1                                      | 2.4                                      | 2.7                                      | 3.0                                      | 3.4                                      | 4.0           |

FIG.12

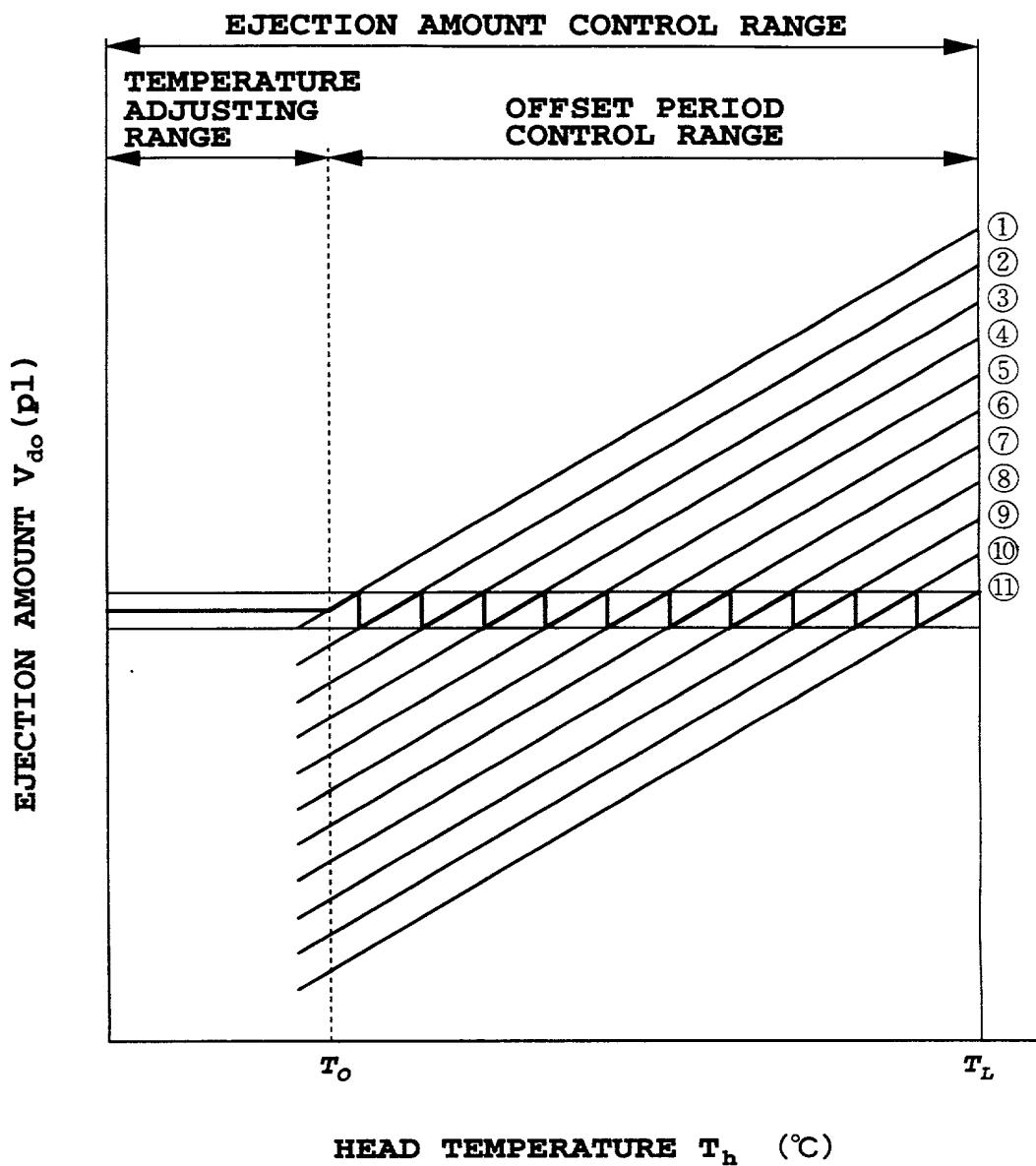
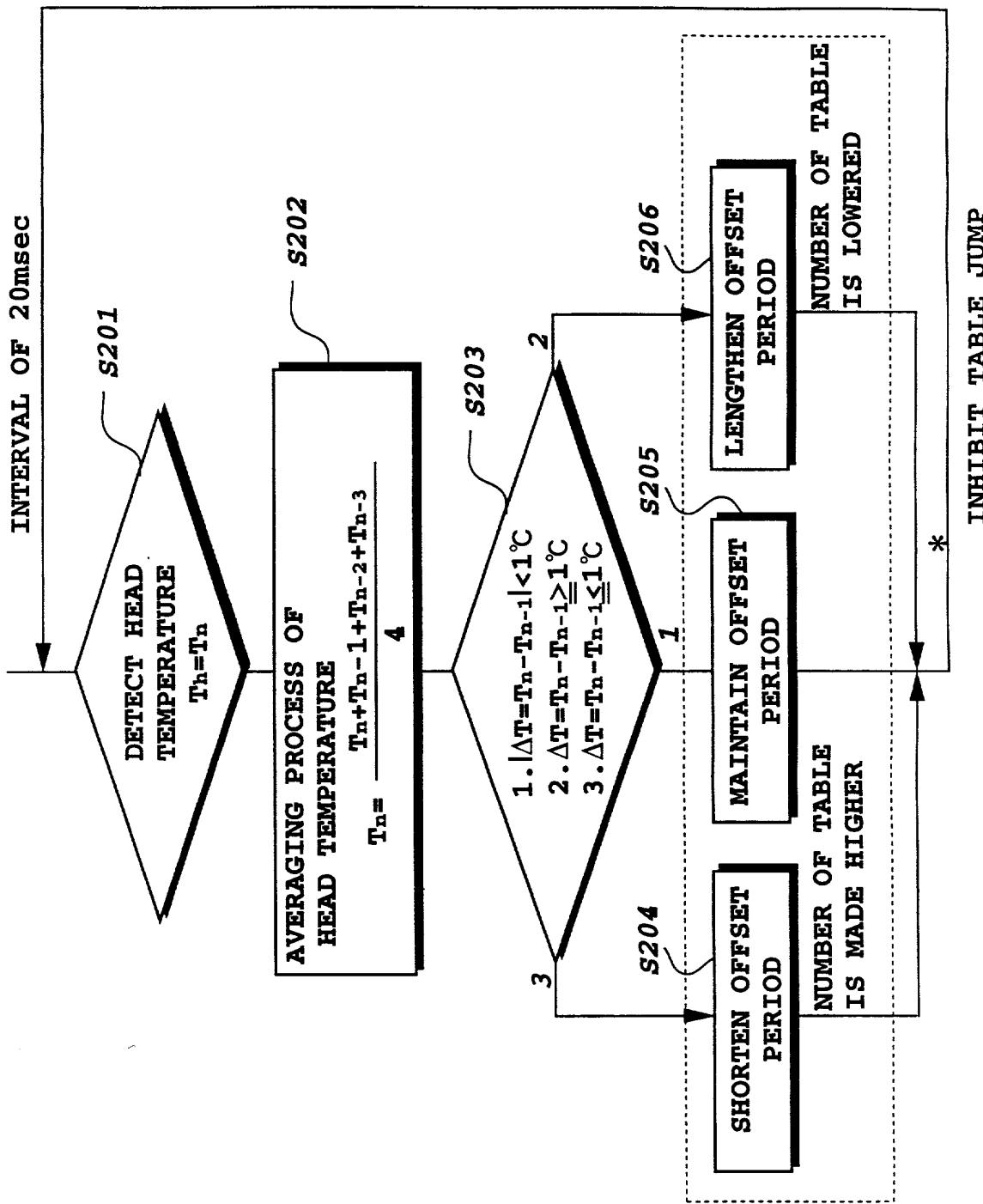
**FIG. 13**

FIG.14

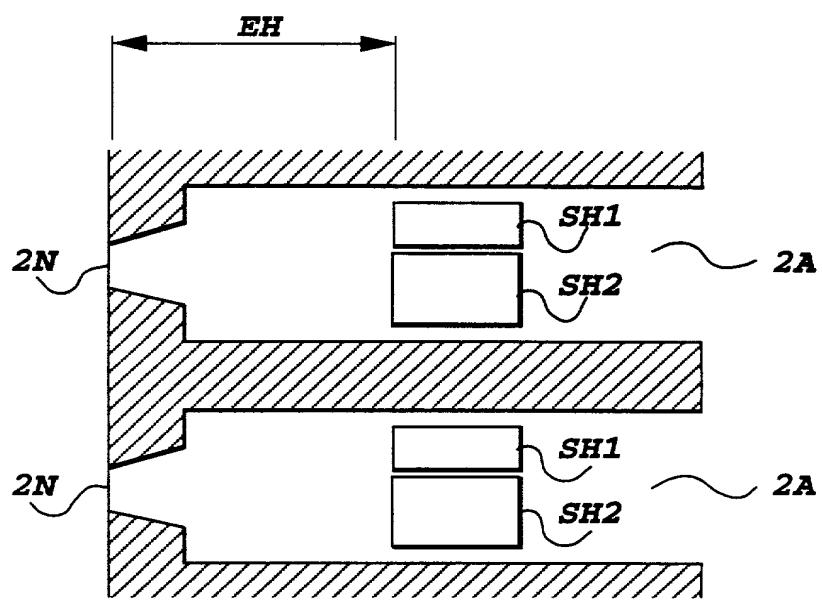


| TABLE NO.                         | (1)                                      | (2)                                      | (3)                                      | (4)                                      | (5)                                      | (6)                                      | (7)                                      | (8)                                      | (9)                                      | (10)                                     | (11) |
|-----------------------------------|--|--|--|--|--|--|--|--|--|--|------|
| HEAD<br>TEMPERATURE<br>Th (°C)    | 26 OR<br>MORE<br>~<br>LESS<br>THAN<br>26 | 29 OR<br>MORE<br>~<br>LESS<br>THAN<br>29 | 32 OR<br>MORE<br>~<br>LESS<br>THAN<br>32 | 35 OR<br>MORE<br>~<br>LESS<br>THAN<br>35 | 38 OR<br>MORE<br>~<br>LESS<br>THAN<br>38 | 41 OR<br>MORE<br>~<br>LESS<br>THAN<br>41 | 44 OR<br>MORE<br>~<br>LESS<br>THAN<br>44 | 47 OR<br>MORE<br>~<br>LESS<br>THAN<br>47 | 50 OR<br>MORE<br>~<br>LESS<br>THAN<br>50 | 53 OR<br>MORE<br>~<br>LESS<br>THAN<br>53 |      |
| OFFSET<br>PERIOD<br>$\tau$ (μsec) | 0  | -0.8                                     | -1.2                                     | -1.5                                     | -1.8                                     | -2.1                                     | -2.4                                     | -2.7                                     | -3.0                                     | -3.4                                     | -4.0 |

FIG. 15

| TABLE NO.                               | ①  | ②  | ③  | ④  | ⑤  | ⑥  | ⑦  | ⑧   |
|---|--|--|--|--|--|--|--|-----|
| HEAD<br>TEMPERATURE<br>TH (°C)          | 26 OR<br>MORE<br>~<br>LESS<br>THAN<br>26 | 29 OR<br>MORE<br>~<br>LESS<br>THAN<br>29 | 32 OR<br>MORE<br>~<br>LESS<br>THAN<br>32 | 35 OR<br>MORE<br>~<br>LESS<br>THAN<br>35 | 38 OR<br>MORE<br>~<br>LESS<br>THAN<br>38 | 41 OR<br>MORE<br>~<br>LESS<br>THAN<br>41 | 44 OR<br>MORE<br>~<br>LESS<br>THAN<br>44 |     |
| OFFSET<br>PERIOD<br>$\tau$ ( $\mu$ sec) | 1.2                                      | 1.5                                      | 1.8                                      | 2.1                                      | 2.4                                      | 2.7                                      | 3.0                                      | 3.3 |

FIG. 16



**FIG. 17**

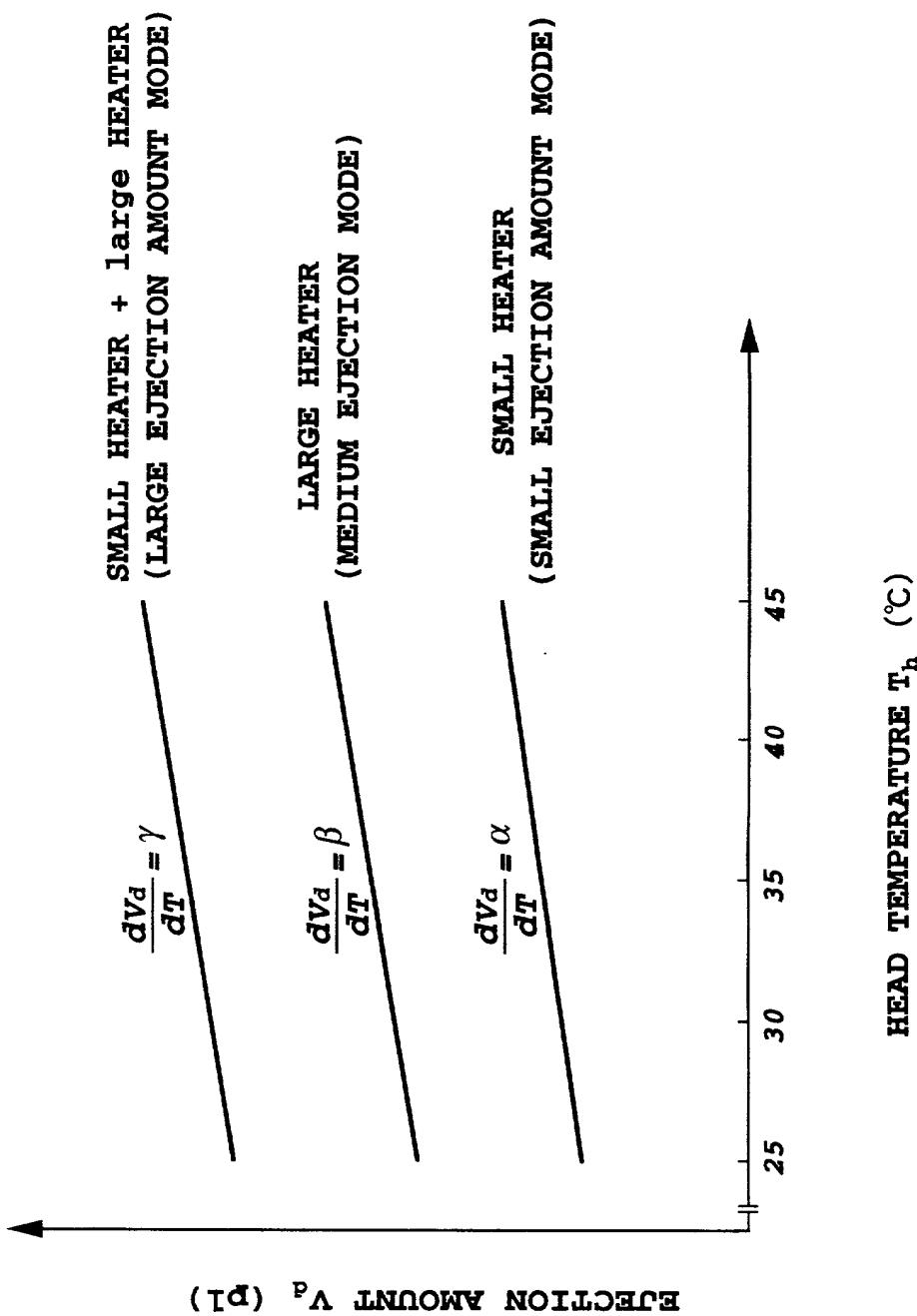


FIG. 18

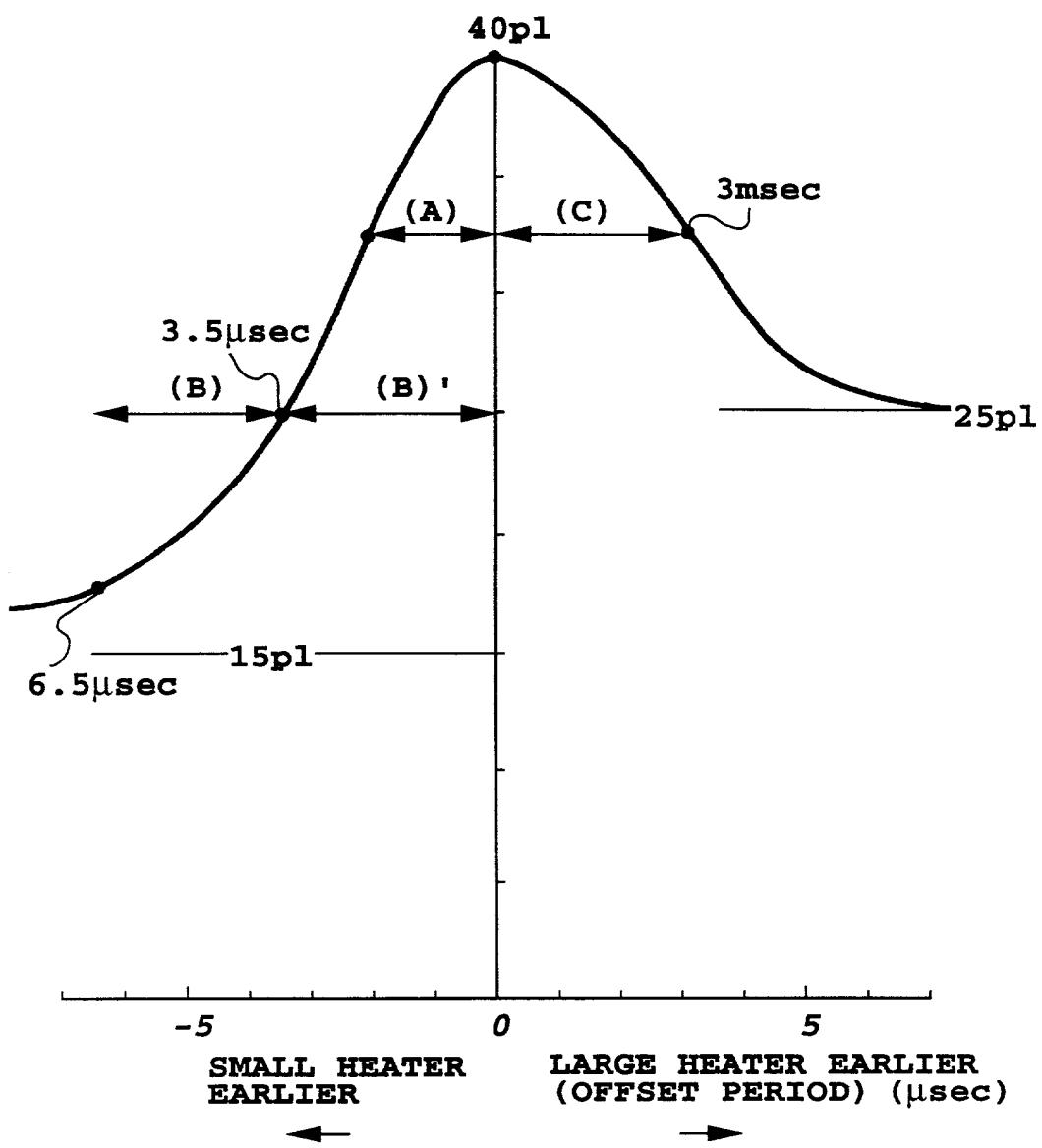


FIG.19

| LARGE EJECTION AMOUNT MODE<br>(40pl/dot) |                              |                              |                              |                              |                              |                              |                              |                              |                              |                              |
|--|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| TABLE NO.                                | ①                            | ②                            | ③                            | ④                            | ⑤                            | ⑥                            | ⑦                            | ⑧                            | ⑨                            | ⑩                            |
| HEAD TEMPERATURE Th (°C)                 | 26 OR MORE<br>~ LESS THAN 26 | 29 OR MORE<br>~ LESS THAN 29 | 32 OR MORE<br>~ LESS THAN 32 | 35 OR MORE<br>~ LESS THAN 35 | 38 OR MORE<br>~ LESS THAN 38 | 41 OR MORE<br>~ LESS THAN 41 | 44 OR MORE<br>~ LESS THAN 44 | 47 OR MORE<br>~ LESS THAN 47 | 47 OR MORE<br>~ LESS THAN 50 | 47 OR MORE<br>~ LESS THAN 50 |
| OFFSET PERIOD τ (μsec)                   | 0                            | 0.4                          | 0.6                          | 0.8                          | 1.0                          | 1.2                          | 1.4                          | 1.6                          | 1.8                          | 2.0                          |

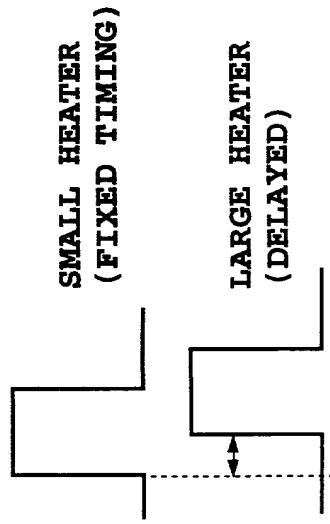


FIG.20A

MEDIUM EJECTION AMOUNT MODE  
(25pl/dot)

| TABLE NO.                | ①                            | ②                            | ③                            | ④                            | ⑤                            | ⑥                            | ⑦                            | ⑧                            | ⑨                            | ⑩                            |
|--------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| HEAD TEMPERATURE Th (°C) | 26 OR MORE<br>~ LESS THAN 26 | 29 OR MORE<br>~ LESS THAN 29 | 32 OR MORE<br>~ LESS THAN 32 | 35 OR MORE<br>~ LESS THAN 35 | 38 OR MORE<br>~ LESS THAN 38 | 41 OR MORE<br>~ LESS THAN 41 | 44 OR MORE<br>~ LESS THAN 44 | 47 OR MORE<br>~ LESS THAN 47 | 50 OR MORE<br>~ LESS THAN 50 | 50 OR MORE<br>~ LESS THAN 50 |
| OFFSET PERIOD τ(μsec)    | 3.5                          | 3.8                          | 4.1                          | 4.4                          | 4.7                          | 5.0                          | 5.3                          | 5.7                          | 6.1                          | 6.5                          |

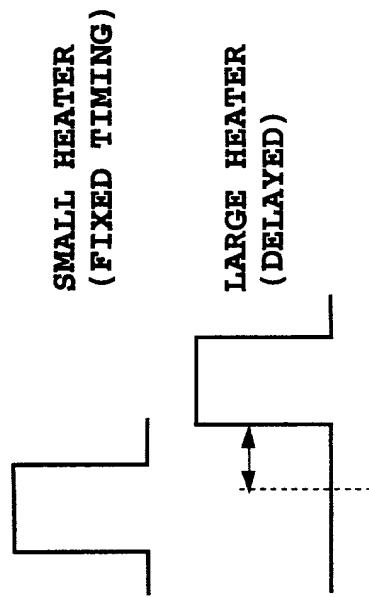


FIG.20B

LARGE EJECTION AMOUNT MODE  
(40p1/dot)

| TABLE NO.                | ①                            | ②                            | ③                            | ④                            | ⑤                            | ⑥                            | ⑦                            | ⑧                            | ⑨                            | ⑩          |
|--------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------|
| HEAD TEMPERATURE Th (°C) | 26 OR MORE<br>~ LESS THAN 26 | 29 OR MORE<br>~ LESS THAN 29 | 32 OR MORE<br>~ LESS THAN 32 | 35 OR MORE<br>~ LESS THAN 35 | 38 OR MORE<br>~ LESS THAN 38 | 41 OR MORE<br>~ LESS THAN 41 | 44 OR MORE<br>~ LESS THAN 44 | 47 OR MORE<br>~ LESS THAN 47 | 47 OR MORE<br>~ LESS THAN 50 | 50 OR MORE |
| OFFSET PERIOD τ(μsec)    | 0                            | 0.6                          | 0.9                          | 1.2                          | 1.5                          | 1.8                          | 2.1                          | 2.4                          | 2.7                          | 3.0        |

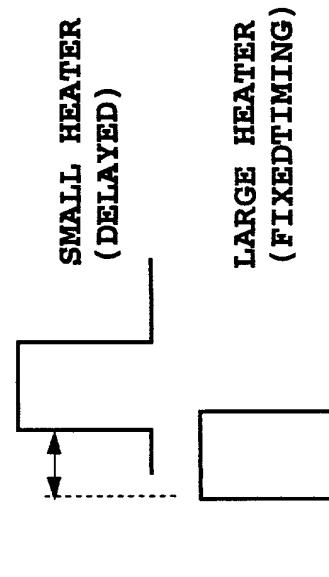


FIG.21A

MEDIUM EJECTION AMOUNT MODE  
(25pl/dot)

| TABLE NO.                | ①                            | ②                            | ③                            | ④                            | ⑤                            | ⑥                            | ⑦                            | ⑧                            | ⑨                            | ⑩                            |
|--------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| HEAD TEMPERATURE Th (°C) | 26 OR MORE<br>~ LESS THAN 26 | 29 OR MORE<br>~ LESS THAN 29 | 32 OR MORE<br>~ LESS THAN 32 | 35 OR MORE<br>~ LESS THAN 35 | 38 OR MORE<br>~ LESS THAN 38 | 41 OR MORE<br>~ LESS THAN 41 | 44 OR MORE<br>~ LESS THAN 44 | 47 OR MORE<br>~ LESS THAN 47 | 47 OR MORE<br>~ LESS THAN 47 | 50 OR MORE<br>~ LESS THAN 50 |
| OFFSET PERIOD τ (μsec)   | 3.5                          | 3.8                          | 4.1                          | 4.4                          | 4.7                          | 5.0                          | 5.3                          | 5.7                          | 6.1                          | 6.5                          |

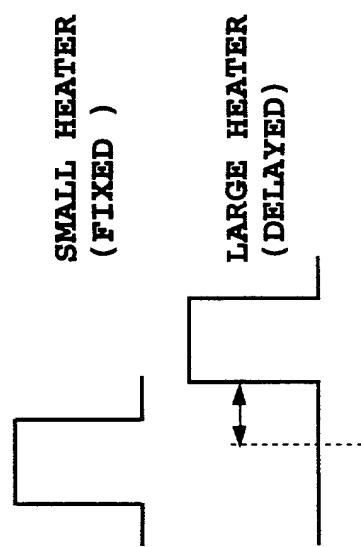
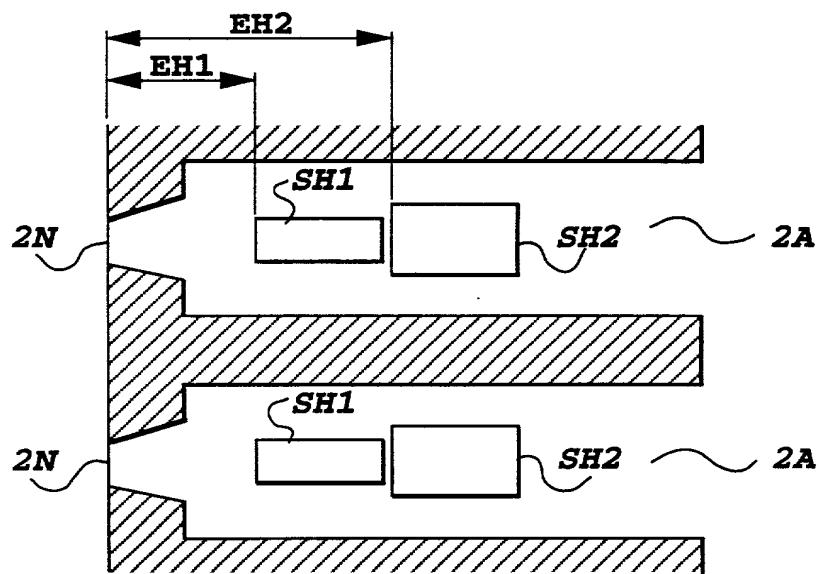
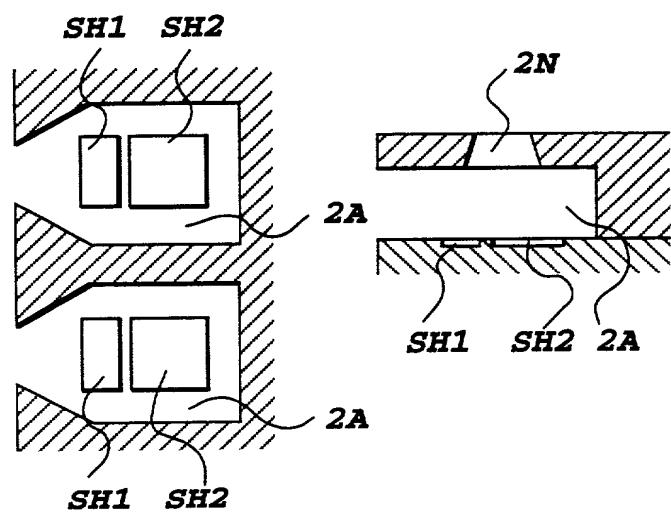


FIG.21B

**SH1: SMALL HEATER**  
**SH2: LARGE HEATER**



**FIG.22**



**FIG.23**

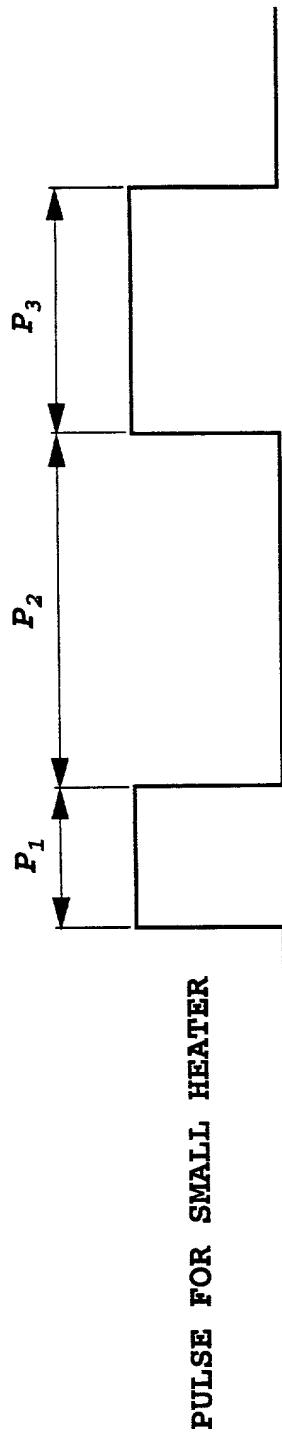


FIG.24A

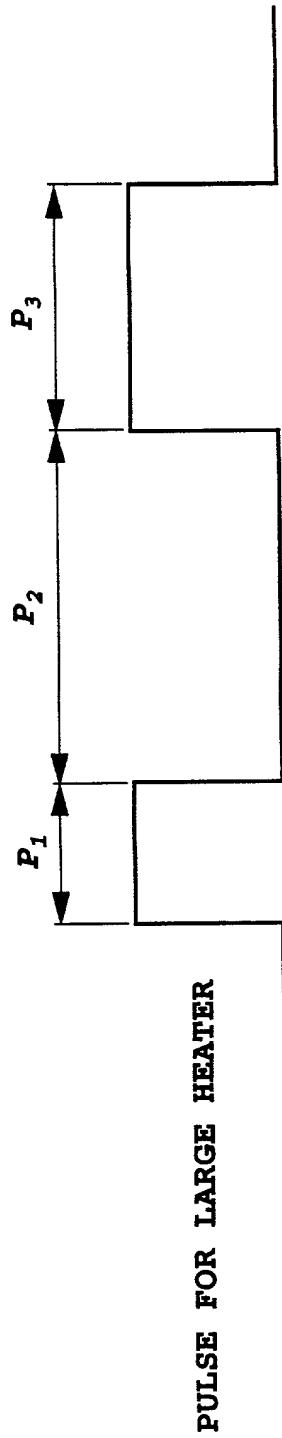


FIG.24B

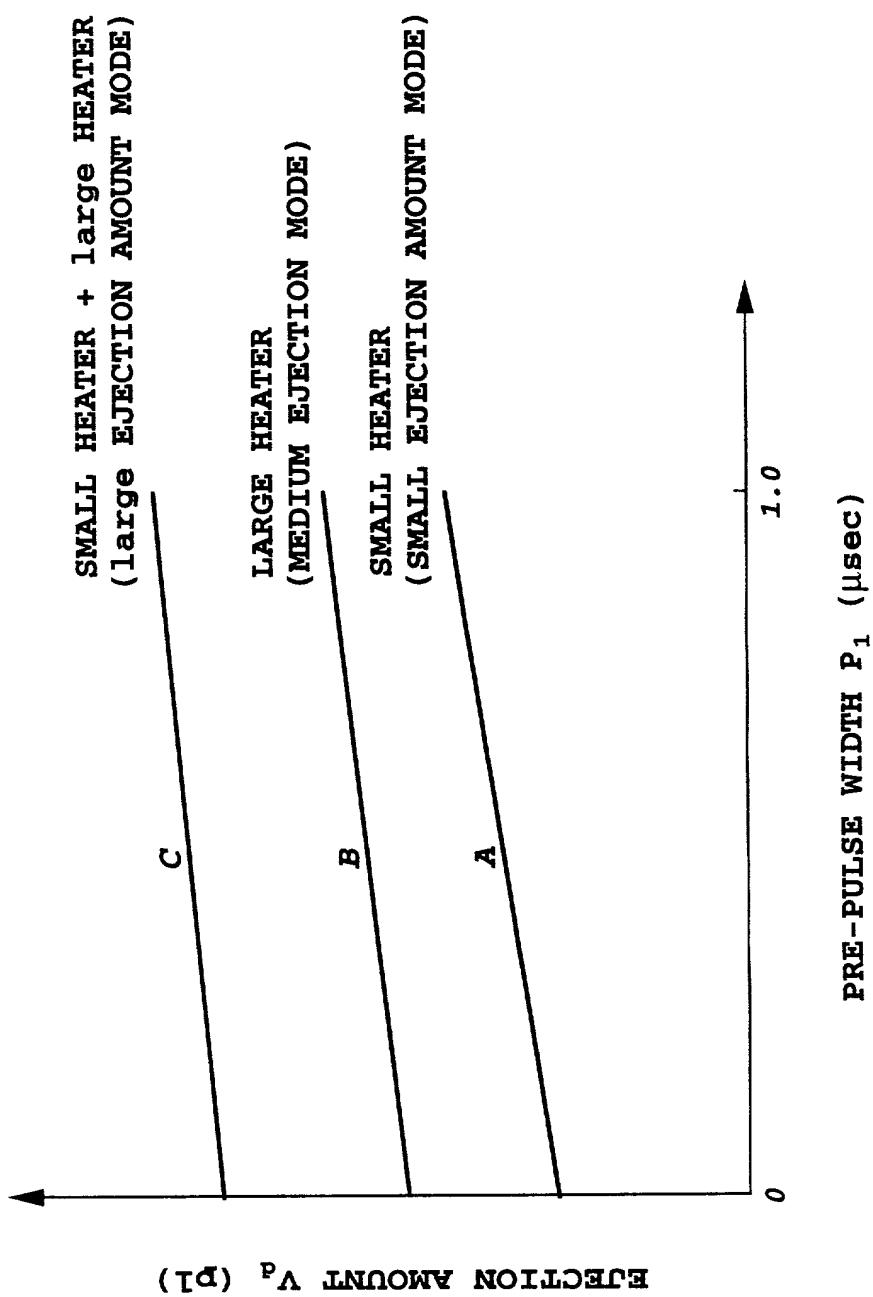


FIG. 25

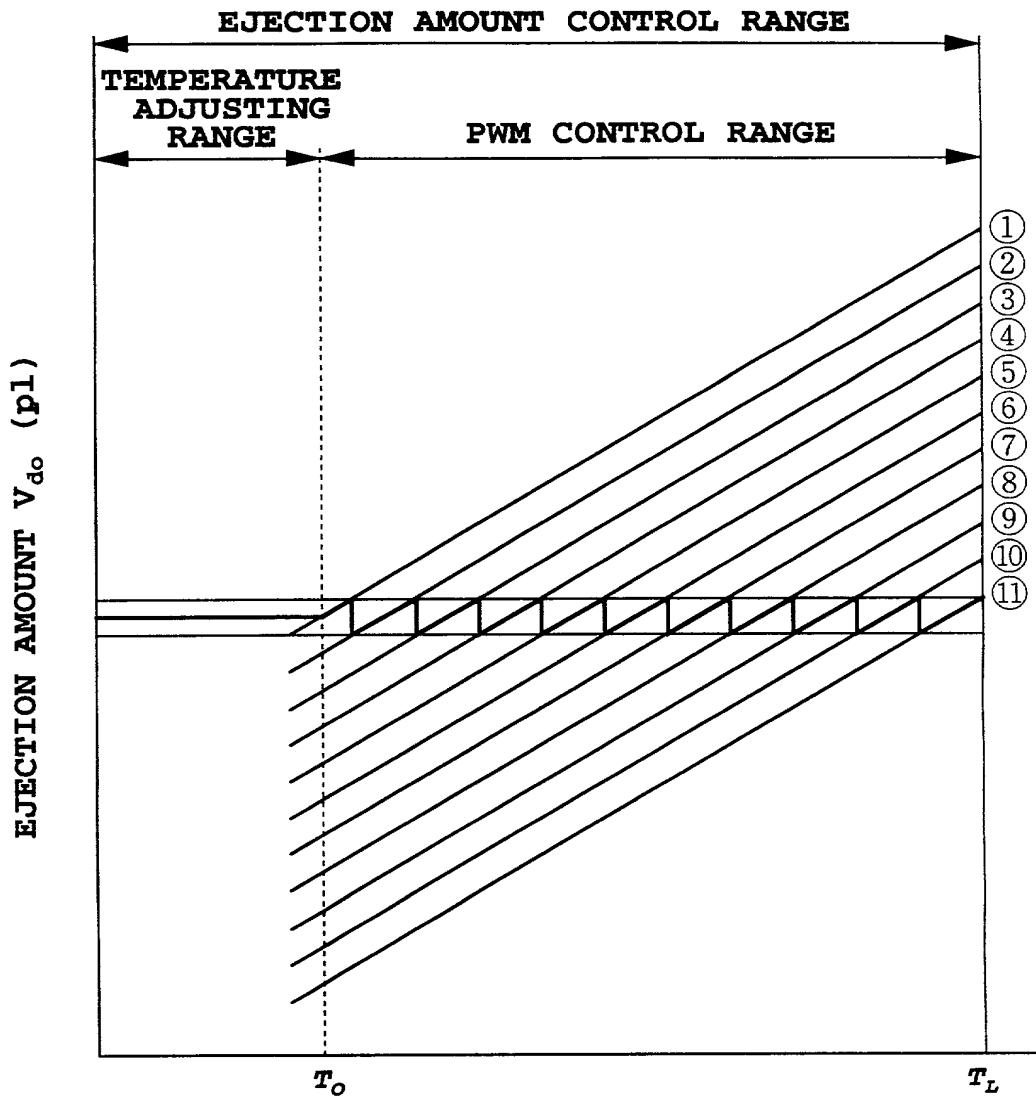


FIG.26

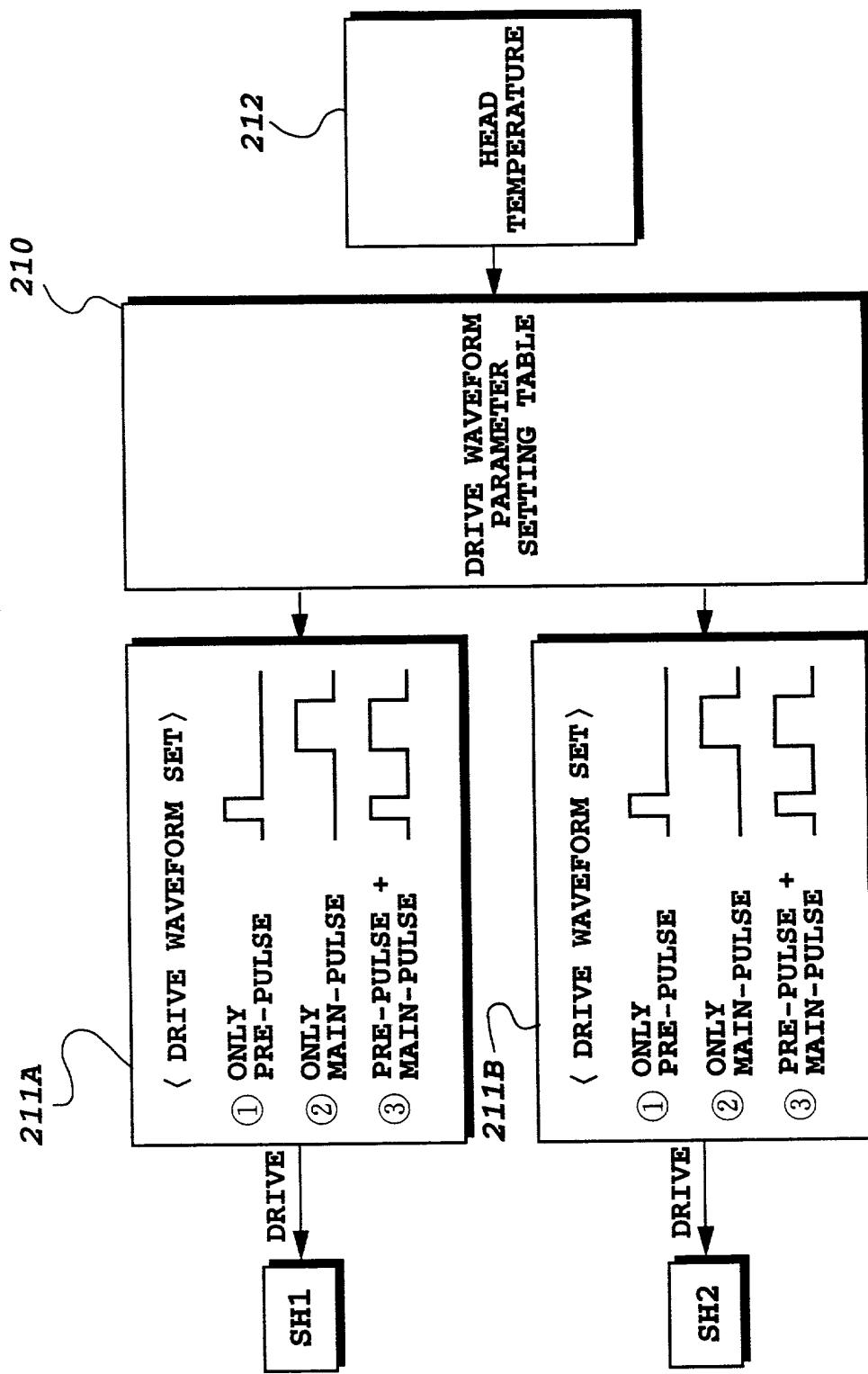


FIG. 27

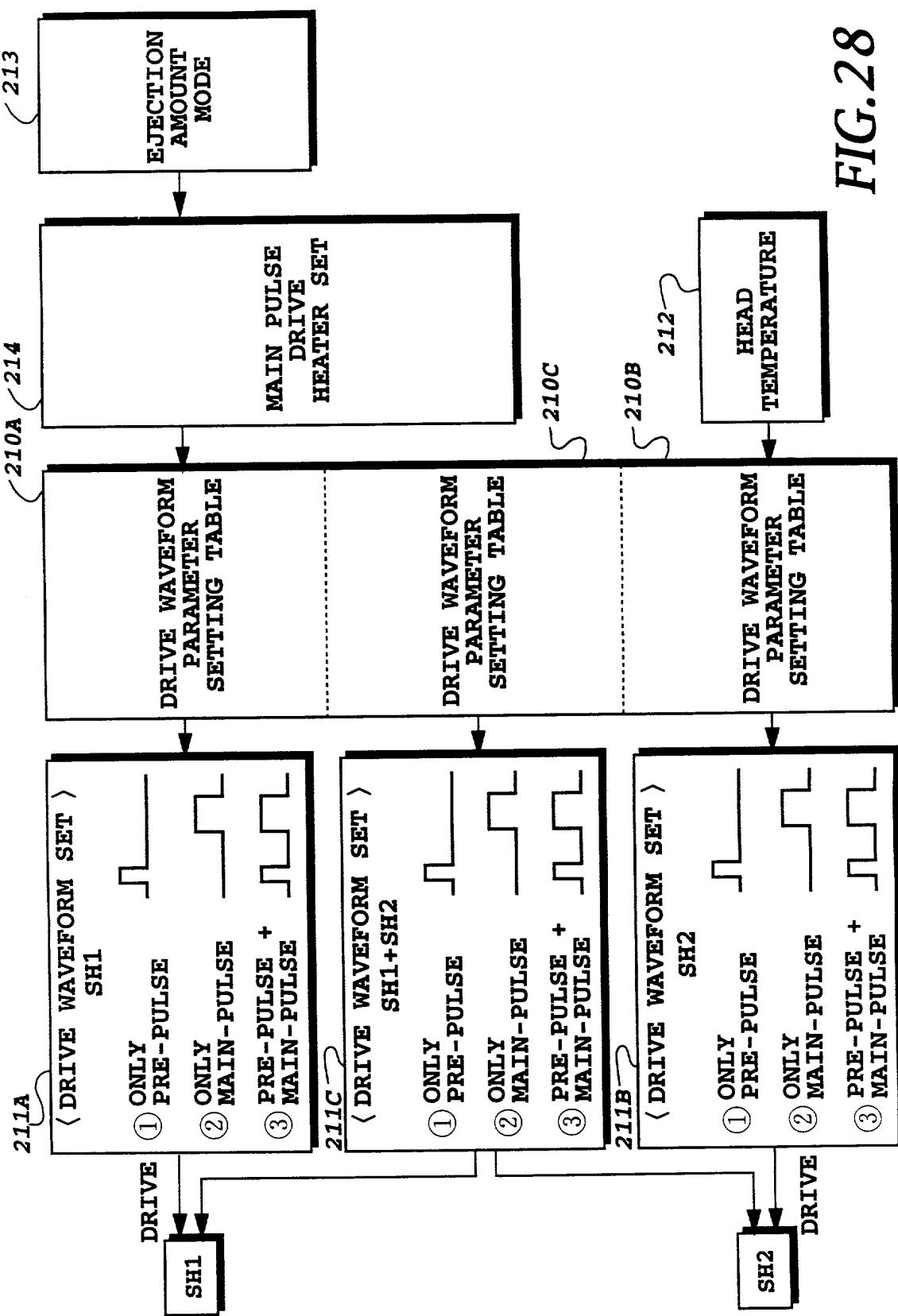


FIG. 28

| EJECTION AMOUNT MODE | MAIN HEAT PULSE DRIVEN HEATER | PRE-HEAD PULSE DRIVEN HEATER |
|----------------------|-------------------------------|------------------------------|
| SMALL                | SH1                           | SH1<br>.....<br>SH2          |
|                      |                               | SH1+SH2                      |
| MEDIUM               | SH2                           | SH1<br>.....<br>SH2          |
|                      |                               | SH1+SH2                      |
| LARGE                | SH1+SH2                       | SH1<br>.....<br>SH2          |
|                      |                               | SH1+SH2                      |

FIG. 29

**P<sub>1</sub>** TABLE FOR SMALL EJECTION AMOUNT MODE

|                                     |      |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |      |
|-------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| HEAD T<br>(°C)                      | ~26  | ~28   | ~30   | ~32   | ~34   | ~36   | ~38   | ~40   | ~42   | ~44   | ~46   | ~48   | ~50   | ~52   | ~54   | ~56   | ~58   | ~60   | ~60  |
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.00 | 0.950 | 0.900 | 0.850 | 0.800 | 0.750 | 0.700 | 0.650 | 0.600 | 0.550 | 0.500 | 0.450 | 0.400 | 0.350 | 0.300 | 0.250 | 0.200 | 0.150 | 0.10 |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 0    | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0    |

(15p1)

**FIG.30A**

**P<sub>1</sub> TABLE FOR MEDIUM EJECTION AMOUNT MODE**

| HEAD T<br>°C                      | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 |
|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>PRE-PULSE<br>μsec | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |
| LARGE HEATER<br>PRE-PULSE<br>μsec | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |

(25p1)

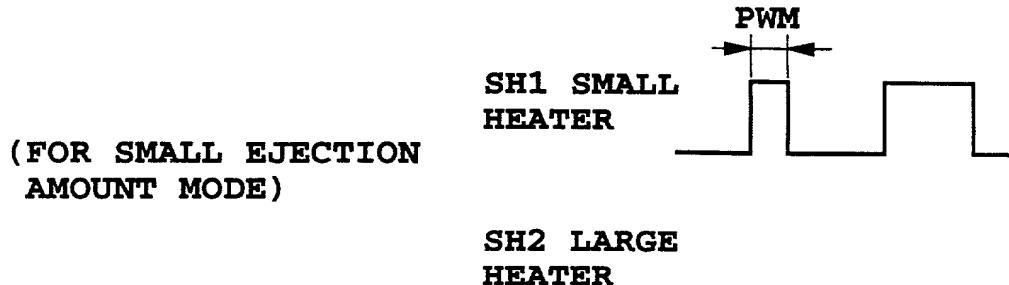
**FIG.30B**

**P<sub>1</sub>** TABLE FOR LARGE EJECTION AMOUNT MODE

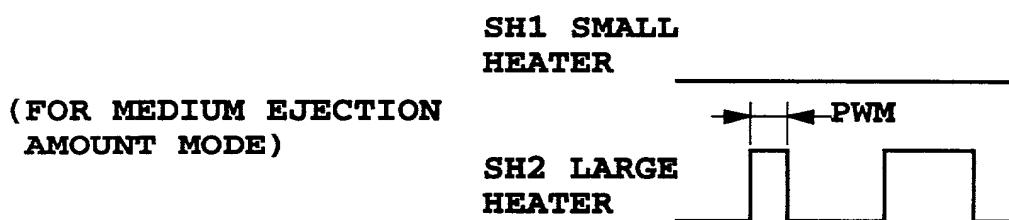
| HEAD T<br>TEMPERATURE<br>(°C)       | ~26 | ~28   | ~30   | ~32   | ~34   | ~36   | ~38   | ~40   | ~42   | ~44   | ~46   | ~48   | ~50   | ~52   | ~54   | ~56   | ~58   | ~60   | ~60~ |
|-------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 0.950 | 0.900 | 0.850 | 0.800 | 0.750 | 0.700 | 0.650 | 0.600 | 0.550 | 0.500 | 0.450 | 0.400 | 0.350 | 0.300 | 0.250 | 0.200 | 0.150 | 0.10 |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 0.950 | 0.900 | 0.850 | 0.800 | 0.750 | 0.700 | 0.650 | 0.600 | 0.550 | 0.500 | 0.450 | 0.400 | 0.350 | 0.300 | 0.250 | 0.200 | 0.150 | 0.10 |

(40p1)

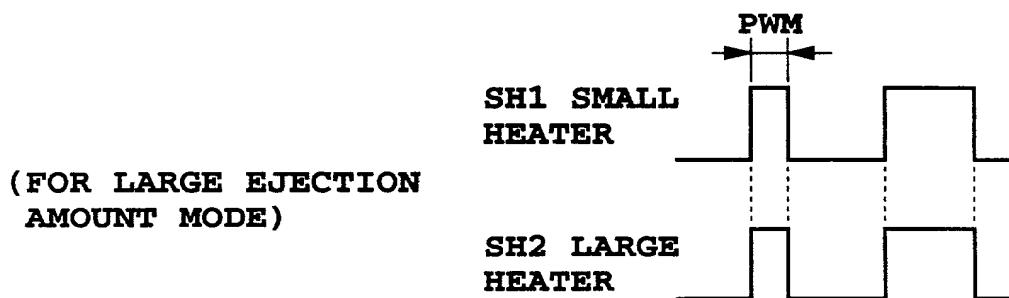
**FIG.30C**



*FIG.31A*



*FIG.31B*



*FIG.31C*

P<sub>1</sub> TABLE FOR SMALL EJECTION AMOUNT MODE

|                                     |     |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------------------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| HEAD T<br>TEMPERATURE<br>(°C)       | ~26 | ~28   | ~30   | ~32   | ~34   | ~36   | ~38   | ~40   | ~42   | ~44   | ~46   | ~48   | ~50   | ~52   | ~54   | ~56   | ~58   | ~60   |
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 0.950 | 0.900 | 0.850 | 0.800 | 0.750 | 0.700 | 0.650 | 0.600 | 0.550 | 0.500 | 0.450 | 0.400 | 0.350 | 0.300 | 0.250 | 0.200 | 0.150 |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 0   | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     | 0     |

(15p1)

FIG.32A

**P<sub>1</sub>** TABLE FOR MEDIUM EJECTION AMOUNT MODE

| HEAD T<br>TEMPERATURE<br>(°C)       | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60 |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.8 | 0.6 | 0.4 | 0.2 | 0   | 0   | 0   |     |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |

(25P1)

**FIG.32B**

**P<sub>1</sub> TABLE FOR LARGE EJECTION AMOUNT MODE**

| HEAD T<br>TEMPERATURE<br>(°C)       | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60 |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 | 0.1 | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |

(40pl)

**FIG.32C**

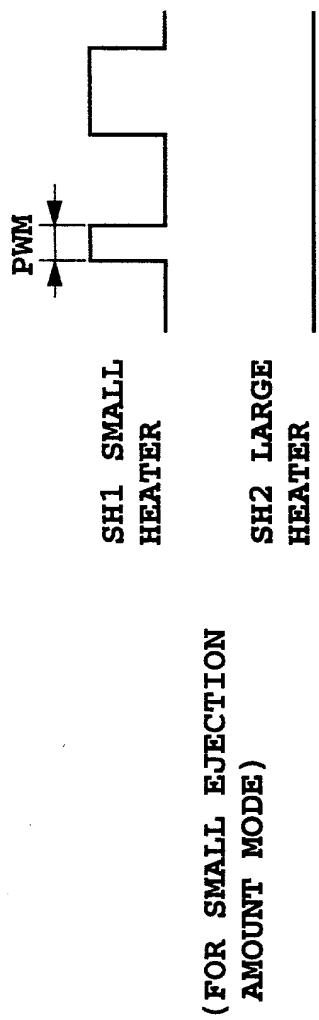


FIG.33A

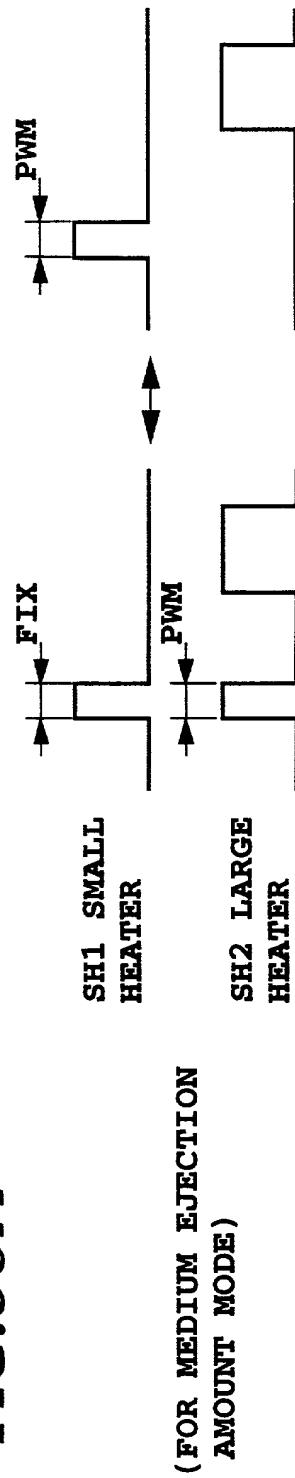


FIG.33B

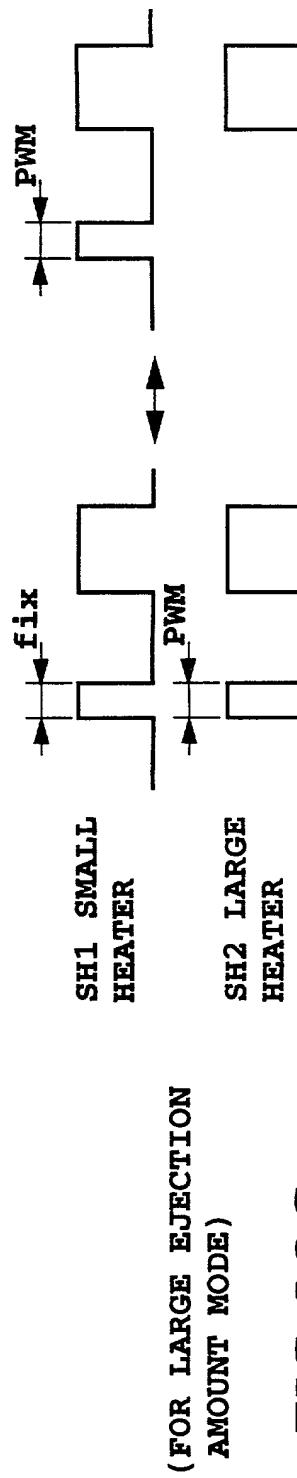


FIG.33C

P<sub>1</sub> TABLE FOR SMALL EJECTION AMOUNT MODE  
(FOR LOW TEMPERATURE)

| HEAD T<br>TEMPERATURE<br>(°C)       | ~16 | ~18   | ~20  | ~22 | ~24   | ~26  | ~28 | ~30   | ~32  | ~34 | ~36   | ~38  | ~40 | ~42   | ~44  | ~46 | ~48   | ~50   | ~50  |
|-------------------------------------|-----|-------|------|-----|-------|------|-----|-------|------|-----|-------|------|-----|-------|------|-----|-------|-------|------|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0     | 0    | 0   | 0     | 0     | 0    |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 2.0 | 1.931 | 1.86 | 1.8 | 1.731 | 1.66 | 1.6 | 1.531 | 1.46 | 1.4 | 1.331 | 1.26 | 1.2 | 1.131 | 1.06 | 1.0 | 0.930 | 0.870 | 0.80 |

(15p1)

FIG.34A

P<sub>1</sub> TABLE FOR MEDIUM EJECTION AMOUNT MODE  
 (FOR LOW TEMPERATURE)

| HEAD T<br>(°C)                      | ~16 | ~18 | ~20 | ~22 | ~24 | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~50 |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 3.0 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.8 | 1.6 | 1.4 | 1.2 | 1.0 | 0.8 | 0.6 | 0.4 | 0.2 | 0   | 0   | 0   |     |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |     |

(25p1)

FIG.34B

P<sub>1</sub> TABLE FOR LARGE EJECTION AMOUNT MODE  
(FOR LOW TEMPERATURE)

| HEAD T<br>TEMPERATURE<br>(°C)       | ~16 | ~18 | ~20 | ~22 | ~24 | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~50 |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 2.0 | 1.9 | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.3 | 0.2 |

(40p1)

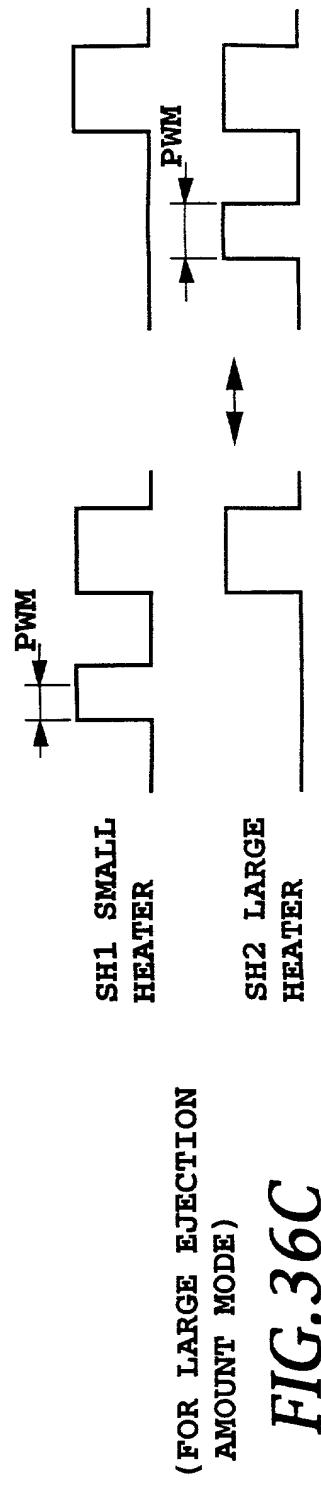
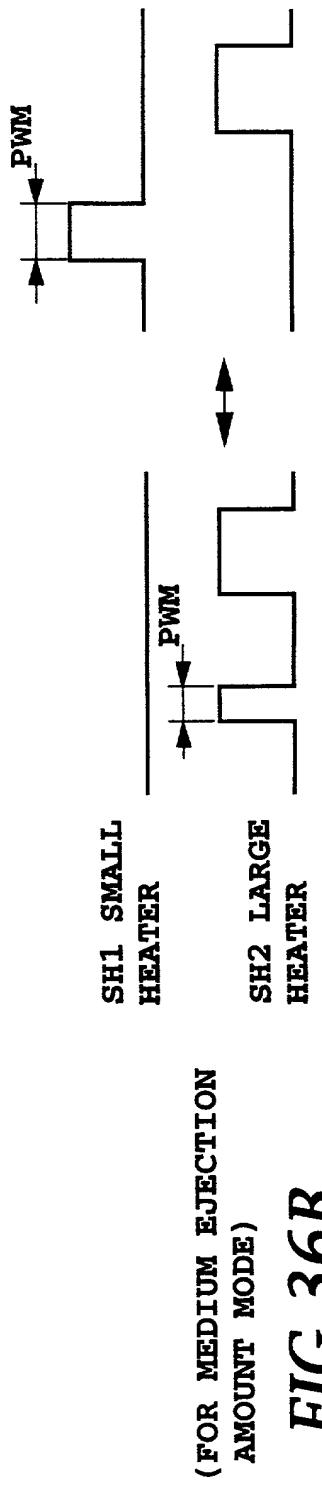
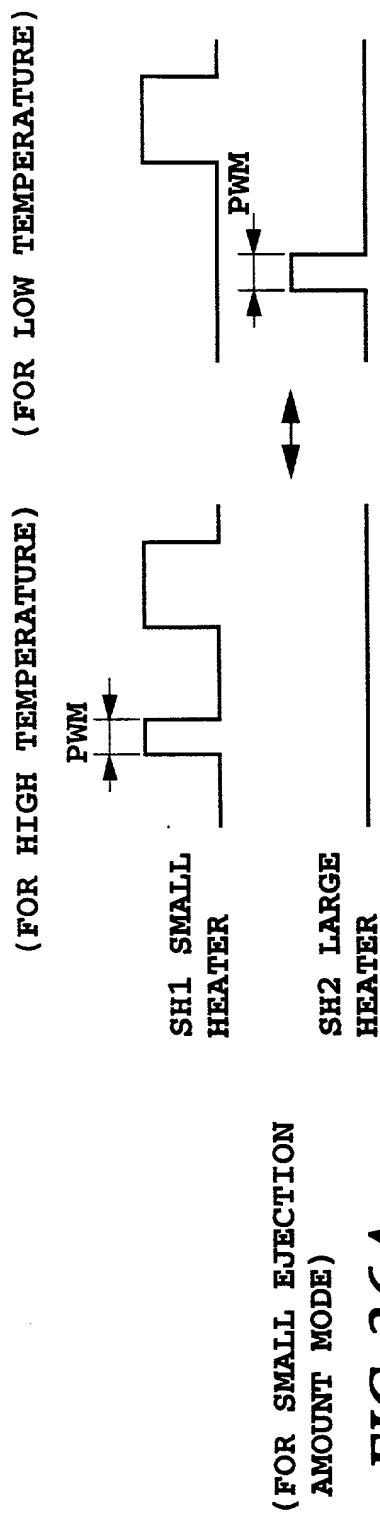
FIG. 35A

P<sub>1</sub> TABLE FOR LARGE EJECTION AMOUNT MODE  
(FOR HIGH TEMPERATURE)

| HEAD T<br>TEMPERATURE<br>(°C)       | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58  | ~60 | ~60~ |
|-------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|------|
| SMALL HEATER<br>PRE-PULSE<br>(μsec) | 1.8 | 1.7 | 1.6 | 1.5 | 1.4 | 1.3 | 1.2 | 1.1 | 1.0 | 0.9 | 0.8 | 0.7 | 0.6 | 0.5 | 0.4 | 0.. | 30.2 | 0.1 | 0    |
| LARGE HEATER<br>PRE-PULSE<br>(μsec) | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0   | 0    | 0   |      |

(40p1)

FIG.35B



OFF TIME P<sub>2</sub> TABLE FOR SMALL EJECTION AMOUNT MODE

|                                    |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| HEAD T<br>TEMPERATURE<br>(°C)      | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60~ |
| SMALL HEATER<br>OFF TIME<br>(usec) | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2  |
| LARGE HEATER<br>OFF TIME<br>(usec) | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |      |

(15p1)

FIG.37A

OFF TIME P<sub>2</sub> TABLE FOR MEDIUM EJECTION AMOUNT MODE

| HEAD T<br>TEMPERATURE<br>(°C)      | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60 |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>OFF TIME<br>(usec) | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |
| LARGE HEATER<br>OFF TIME<br>(usec) | 4.0 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.8 | 1.6 | 1.4 | 1.2 | 1.0 | 0.8 | 0.6 | 0.4 |

(25p1)

FIG.37B

OFF TIME P<sub>2</sub> TABLE FOR LARGE EJECTION AMOUNT MODE

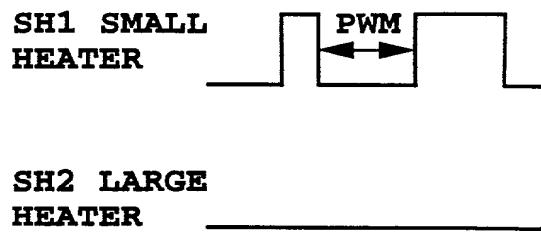
| HEAD T<br>(°C)                     | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60 |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| SMALL HEATER<br>OFF TIME<br>(usec) | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |
| LARGE HEATER<br>OFF TIME<br>(usec) | 4.0 | 3.9 | 3.8 | 3.7 | 3.6 | 3.5 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 2.9 | 2.8 | 2.7 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 |

(40p1)

FIG.37C

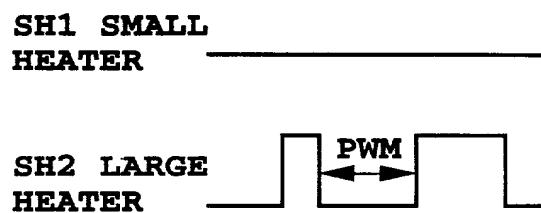
(FOR SMALL EJECTION  
AMOUNT MODE)

**FIG.38A**



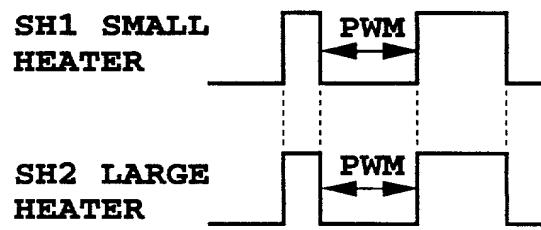
(FOR MEDIUM EJECTION  
AMOUNT MODE)

**FIG.38B**



(FOR LARGE EJECTION  
AMOUNT MODE)

**FIG.38C**



OFF TIME P<sub>2</sub> TABLE FOR SMALL EJECTION AMOUNT MODE

| HEAD T<br>TEMPERATURE<br>(°C)      | ~26 | ~28 | ~30 | ~32 | ~34 | ~36 | ~38 | ~40 | ~42 | ~44 | ~46 | ~48 | ~50 | ~52 | ~54 | ~56 | ~58 | ~60 | ~60~ |
|------------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| SMALL HEATER<br>OFF TIME<br>(μsec) | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -    |
| LARGE HEATER<br>OFF TIME<br>(μsec) | 4.0 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 2.8 | 2.6 | 2.4 | 2.2 | 2.0 | 1.8 | 1.6 | 1.4 | 1.2 | 1.0 | 0.8 | 0.6 | 0.4  |

(15p1)

FIG.39A

## OFF TIME P<sub>2</sub> TABLE FOR MEDIUM EJECTION AMOUNT MODE

(25b1)

**FIG. 39B**

OFF TIME P<sub>2</sub> TABLE FOR LARGE EJECTION AMOUNT MODE

|                                    |     |     |     |     |     |      |     |      |      |      |     |      |     |      |     |      |     |      |     |
|------------------------------------|-----|-----|-----|-----|-----|------|-----|------|------|------|-----|------|-----|------|-----|------|-----|------|-----|
| HEAD T<br>(°C)                     | ~26 | ~28 | ~30 | ~32 | ~34 | ~36  | ~38 | ~40  | ~42  | ~44  | ~46 | ~48  | ~50 | ~52  | ~54 | ~56  | ~58 | ~60  | ~60 |
| SMALL HEATER<br>OFF TIME<br>(usec) | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0  | 4.0 | 4.0  | 4.0  | 4.0  | 4.0 | 4.0  | 4.0 | 4.0  | 4.0 | 4.0  | 4.0 | 4.0  | 4.0 |
| LARGE HEATER<br>OFF TIME<br>(usec) | 4.0 | 3.7 | 3.5 | 3.4 | 3.3 | 3.25 | 3.2 | 3.15 | 3.13 | 3.05 | 3.0 | 2.95 | 2.9 | 2.85 | 2.8 | 2.75 | 2.7 | 2.65 | 2.6 |

(40p1)

FIG.39C

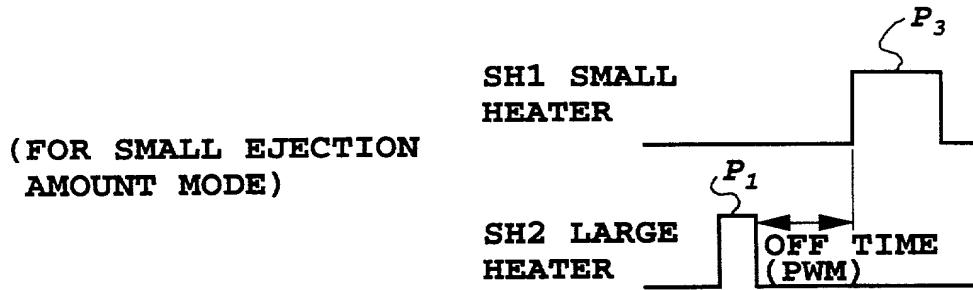


FIG.40A

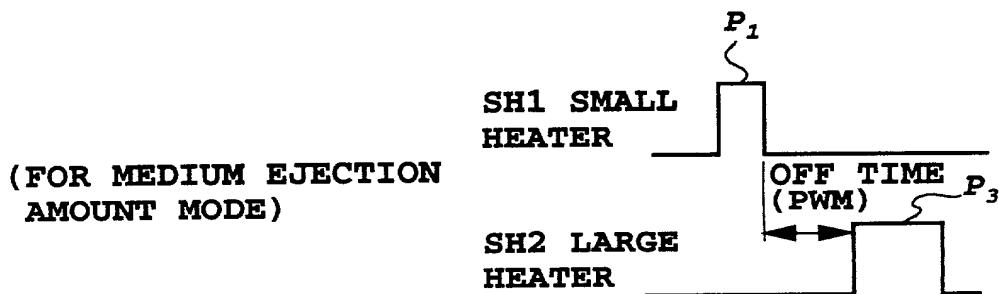


FIG.40B

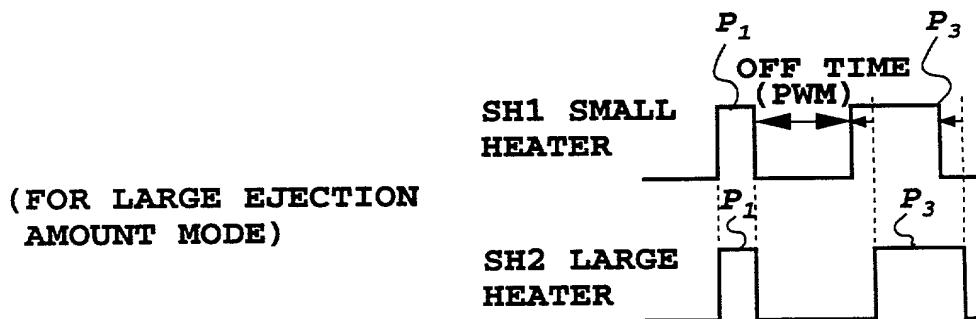
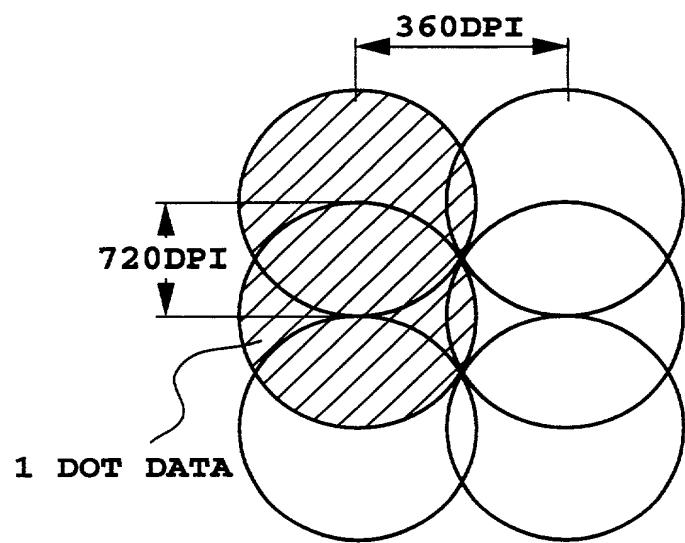


FIG.40C



***FIG.41***

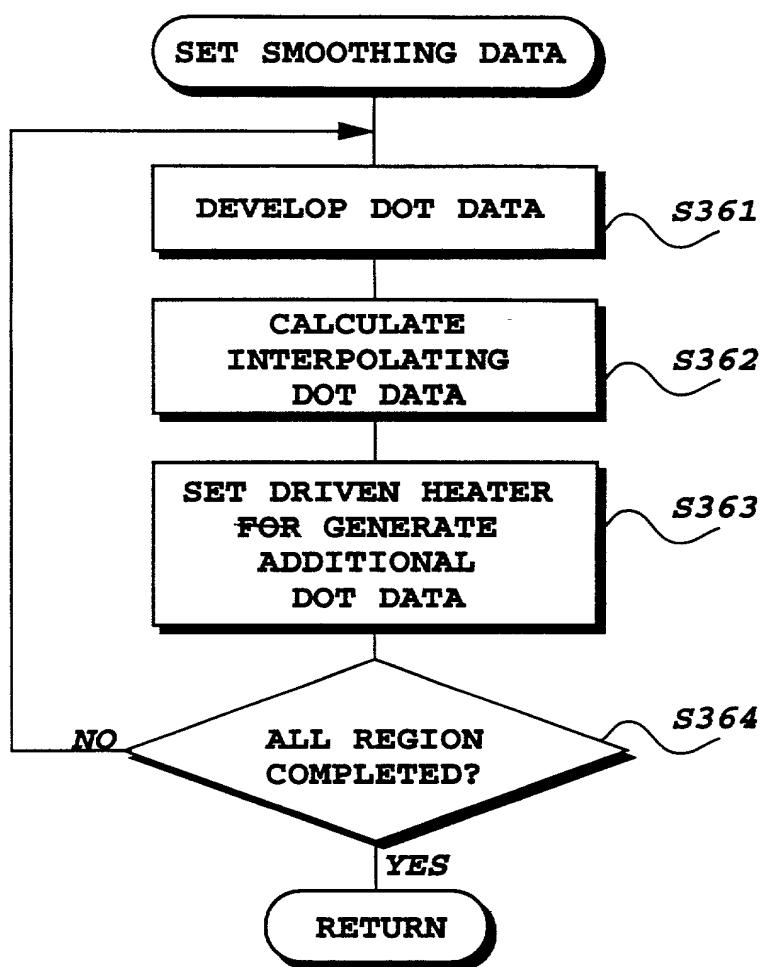


FIG.42

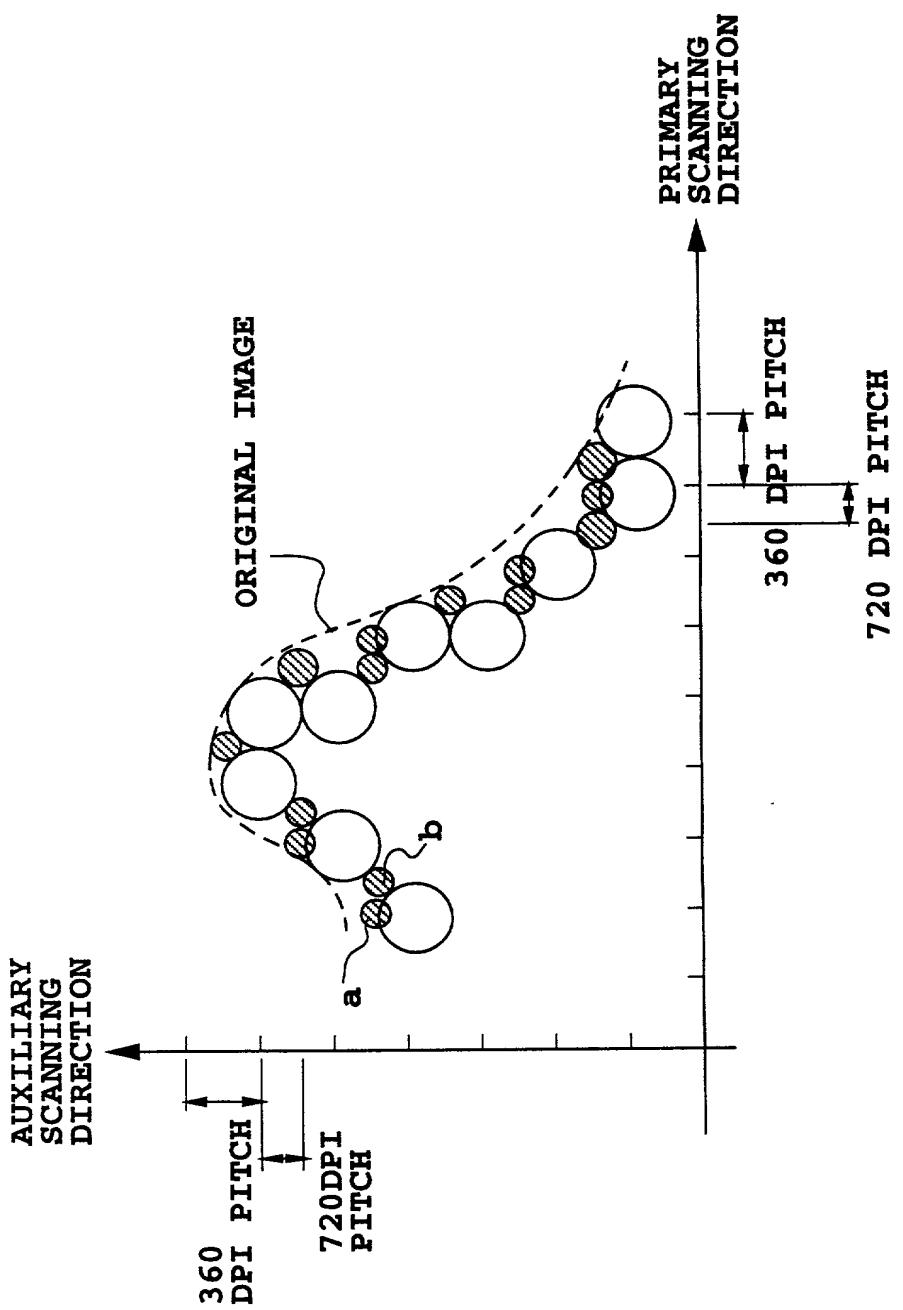
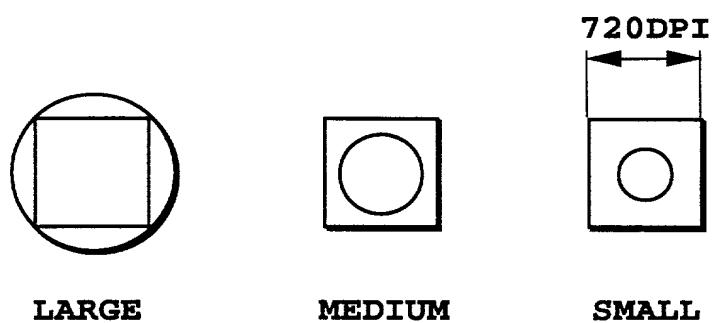
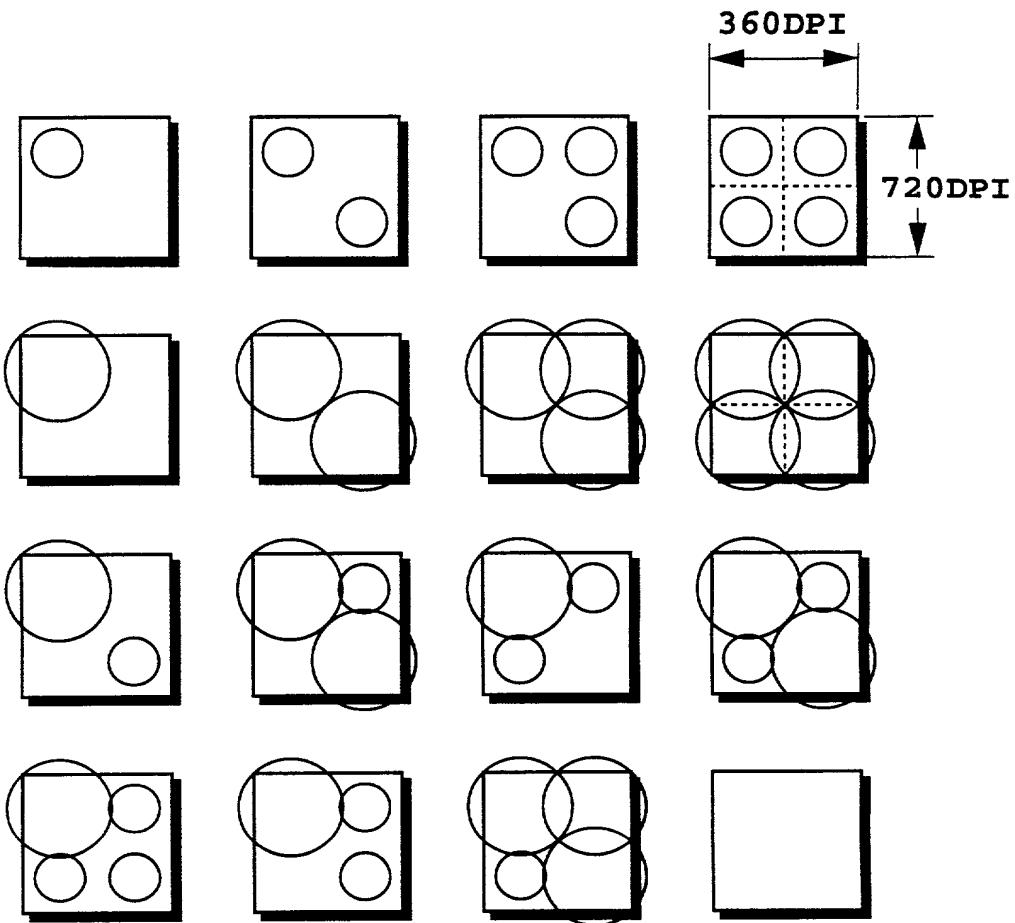


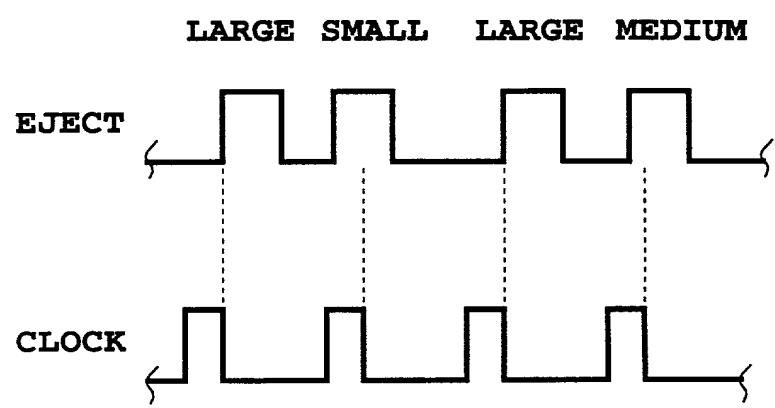
FIG.43



***FIG.44***



**FIG.45**



***FIG.46A***

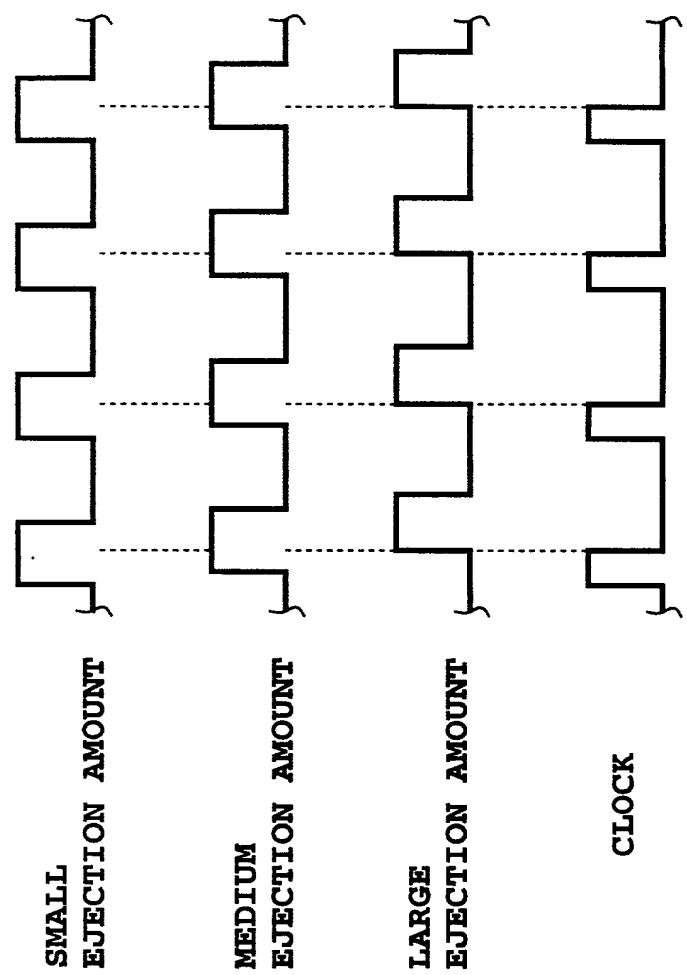
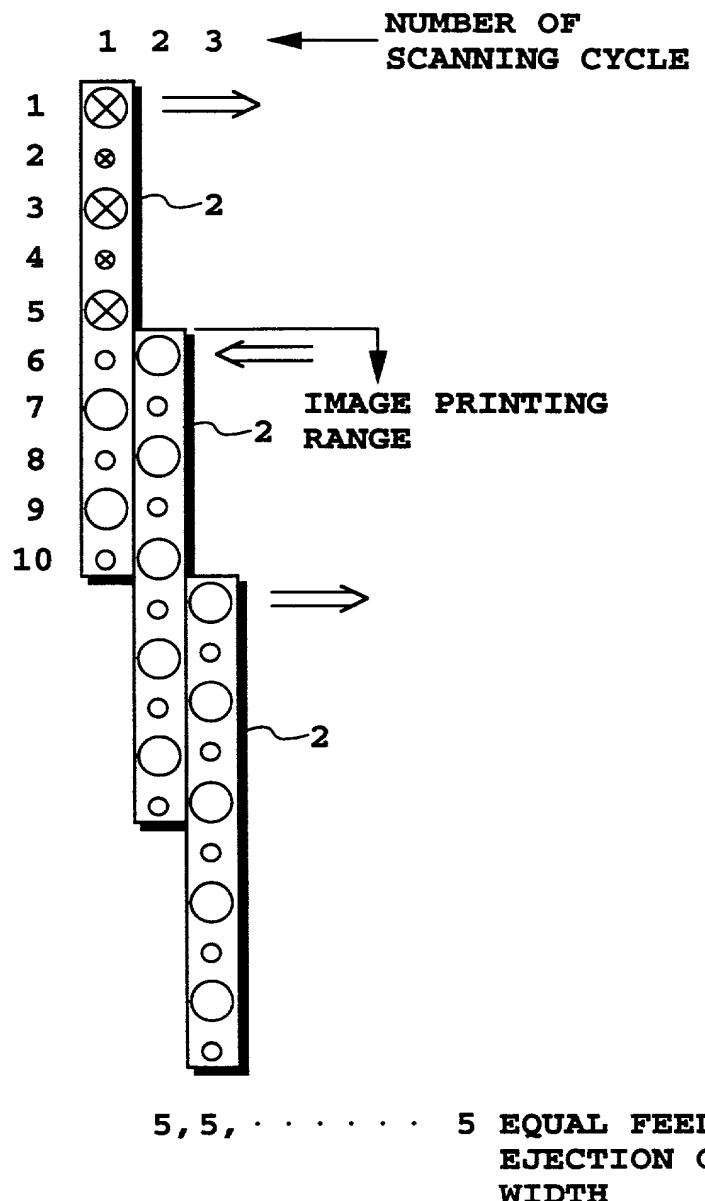
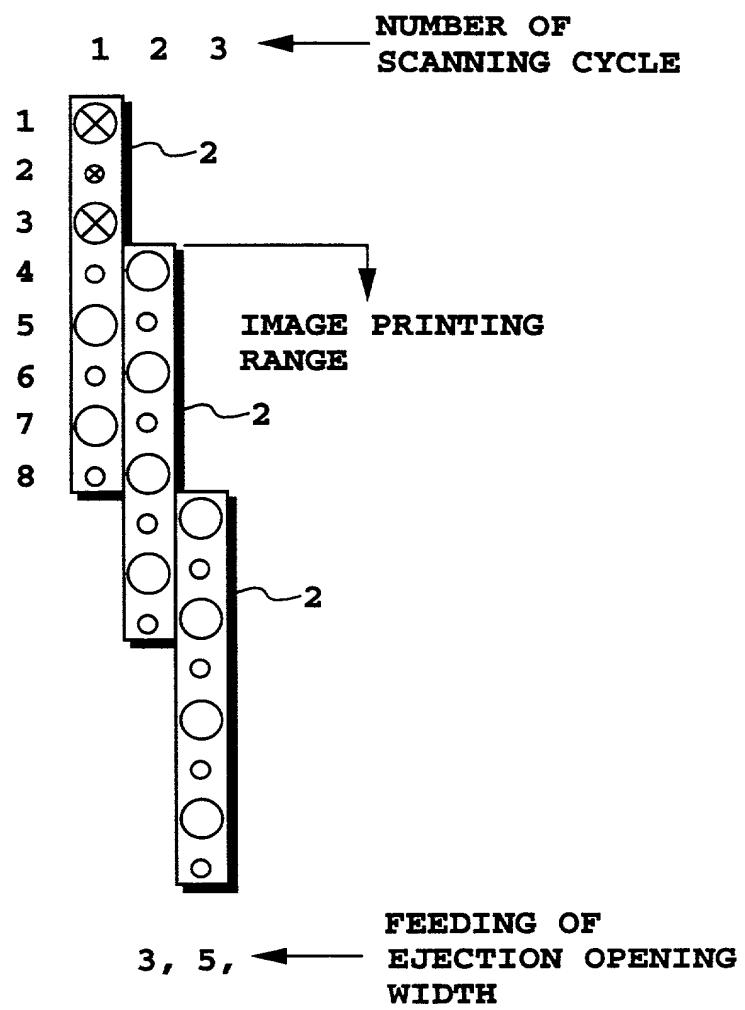


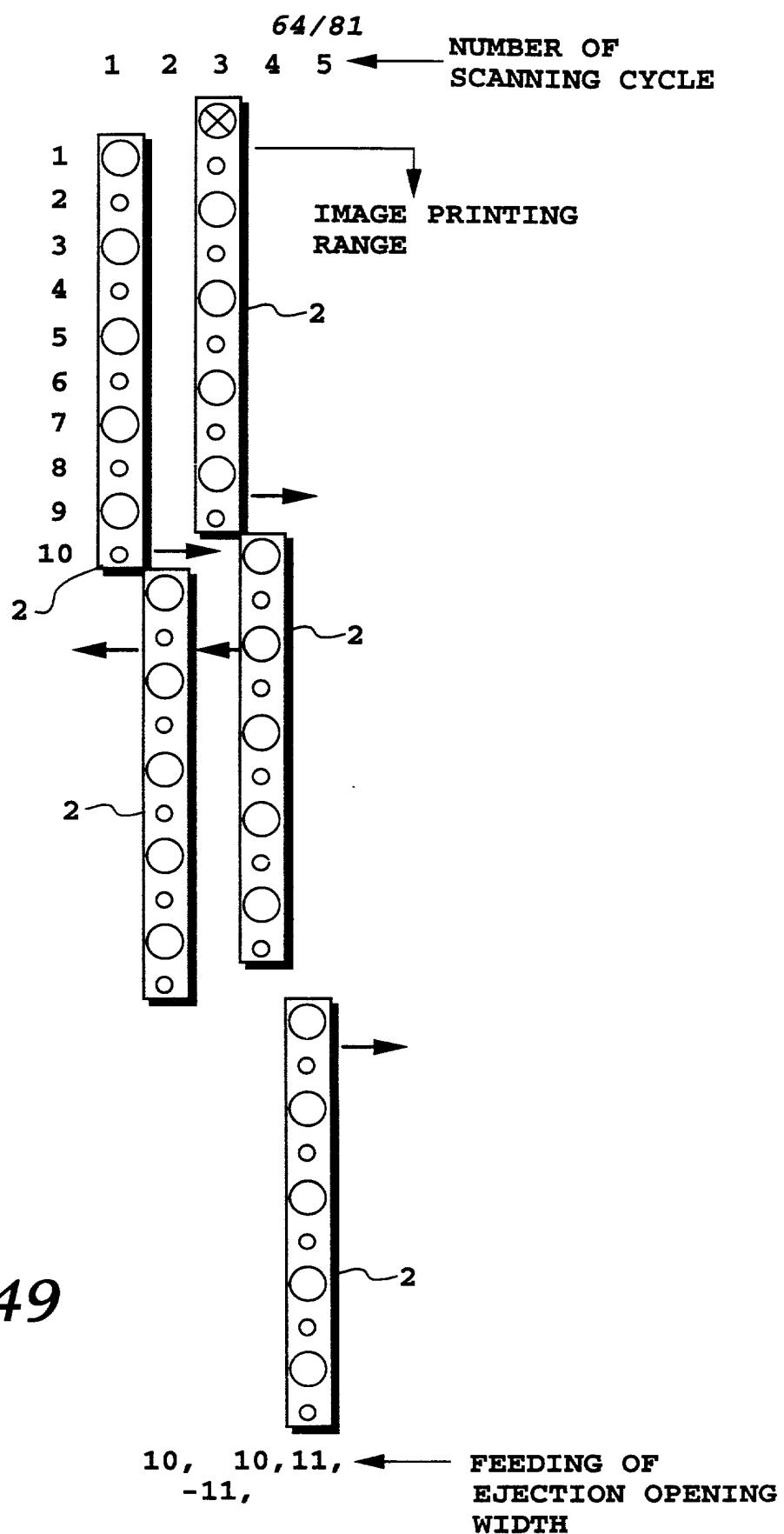
FIG. 46B



*FIG.47*

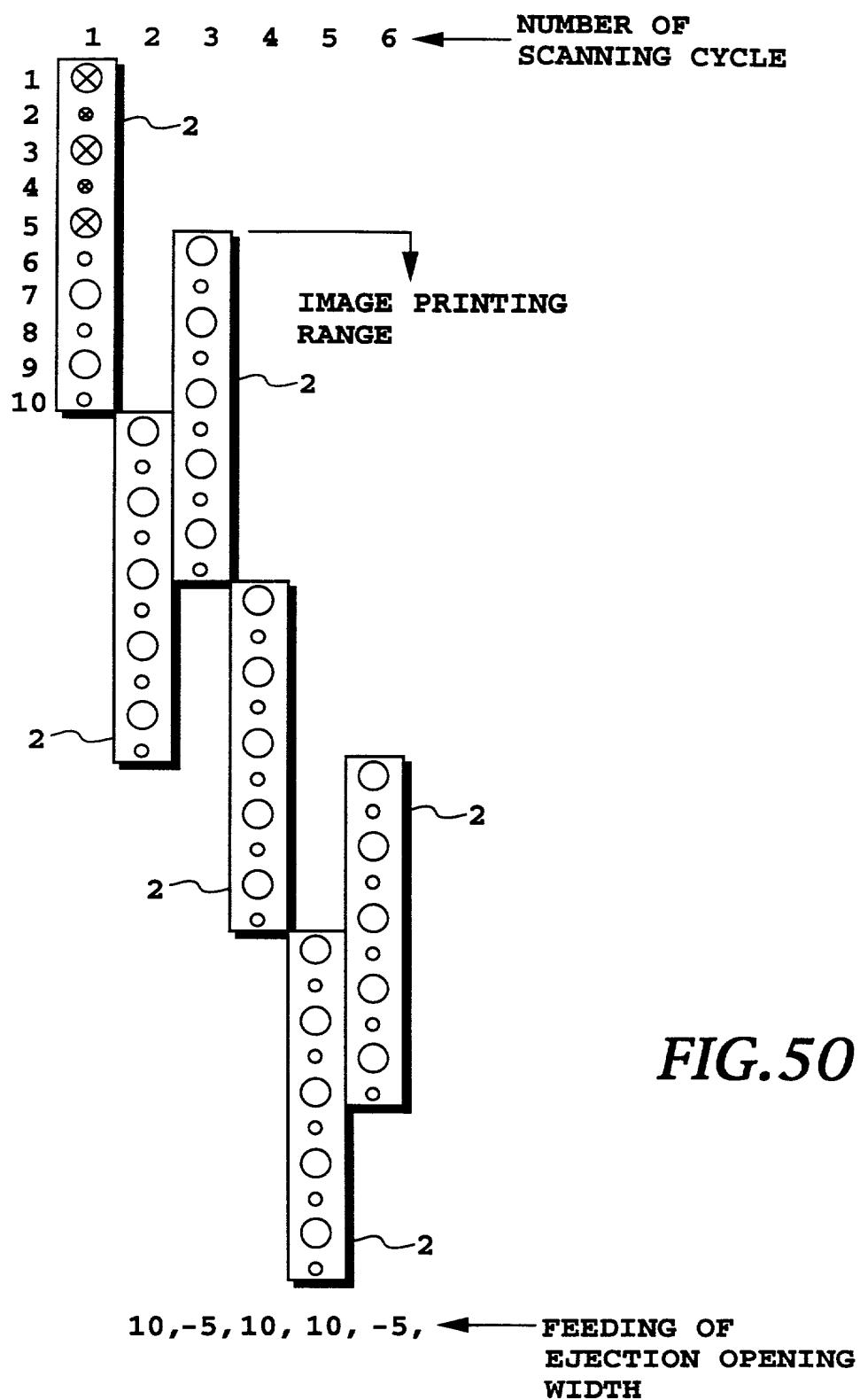


**FIG.48**

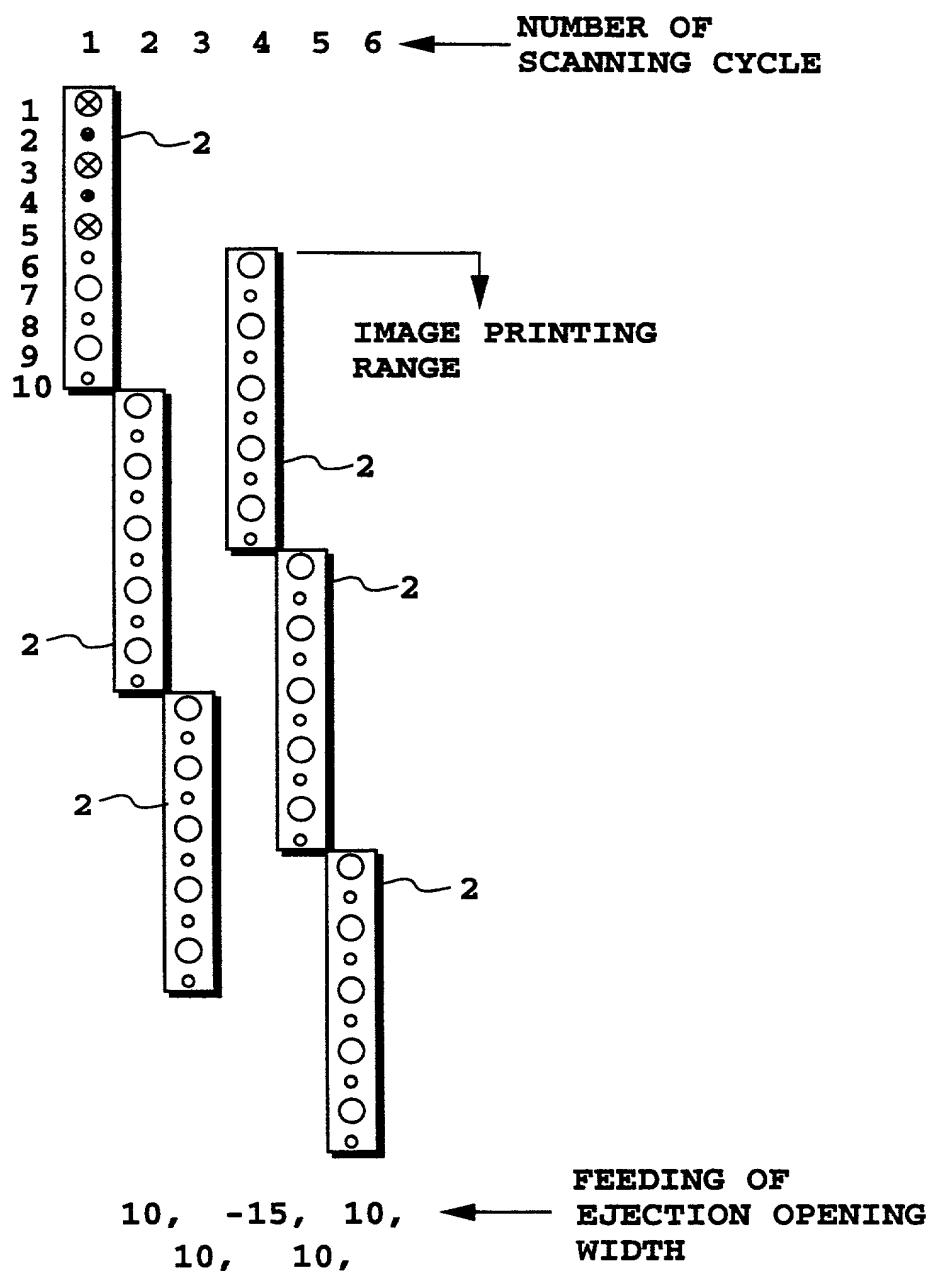


**FIG.49**

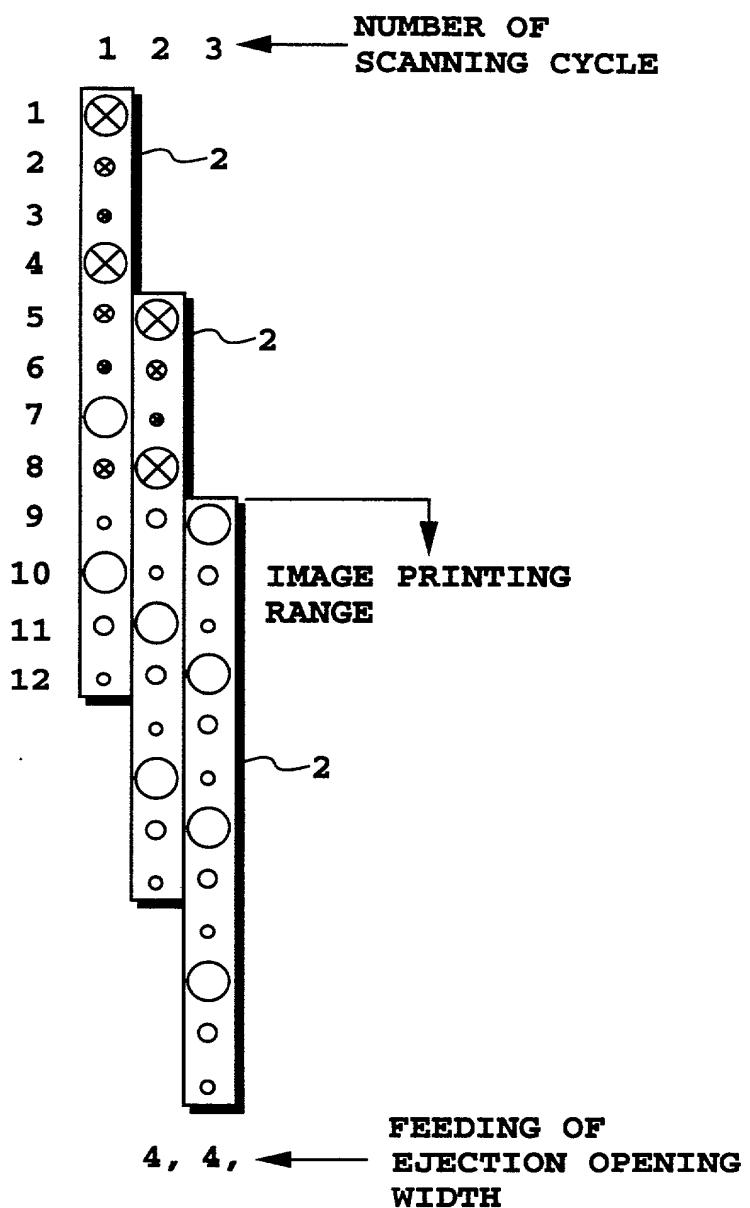
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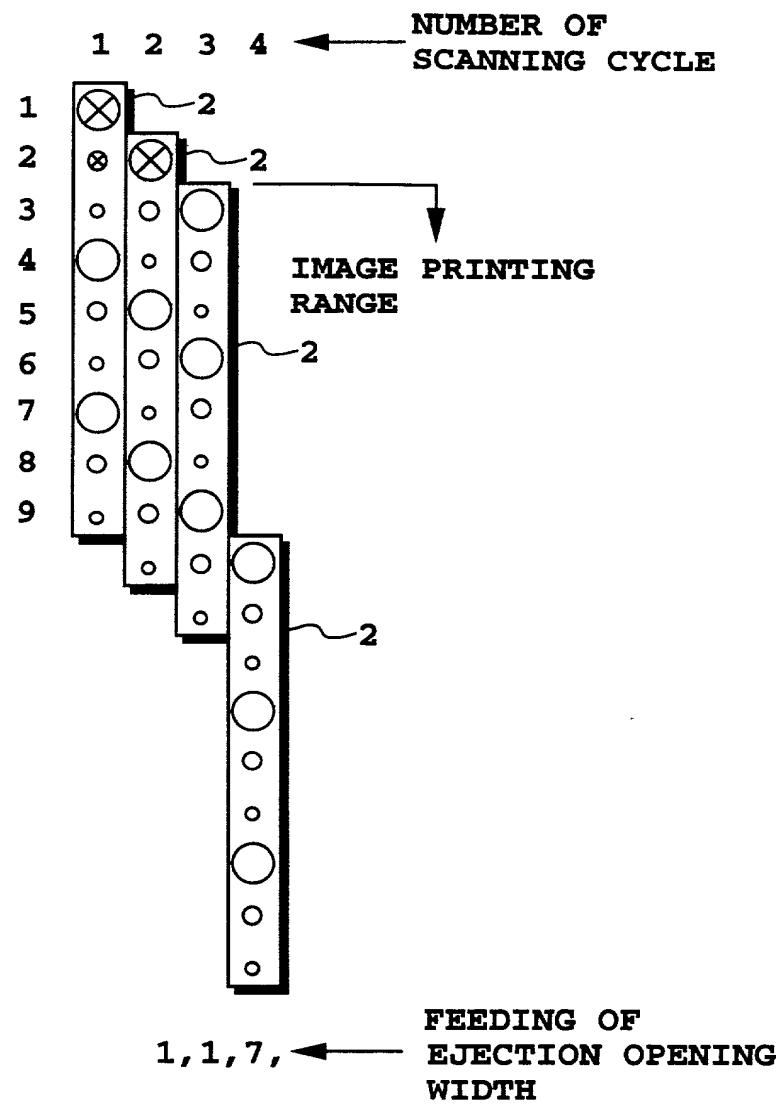
**FIG.50**



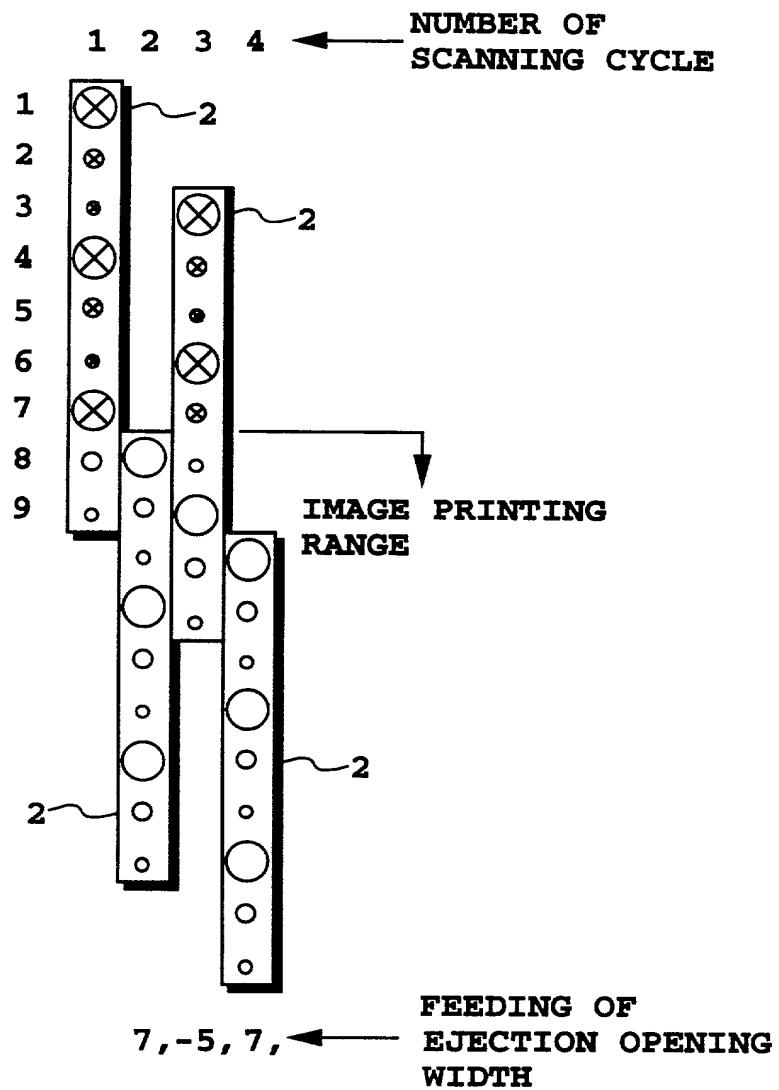
*FIG.51*



*FIG.52*

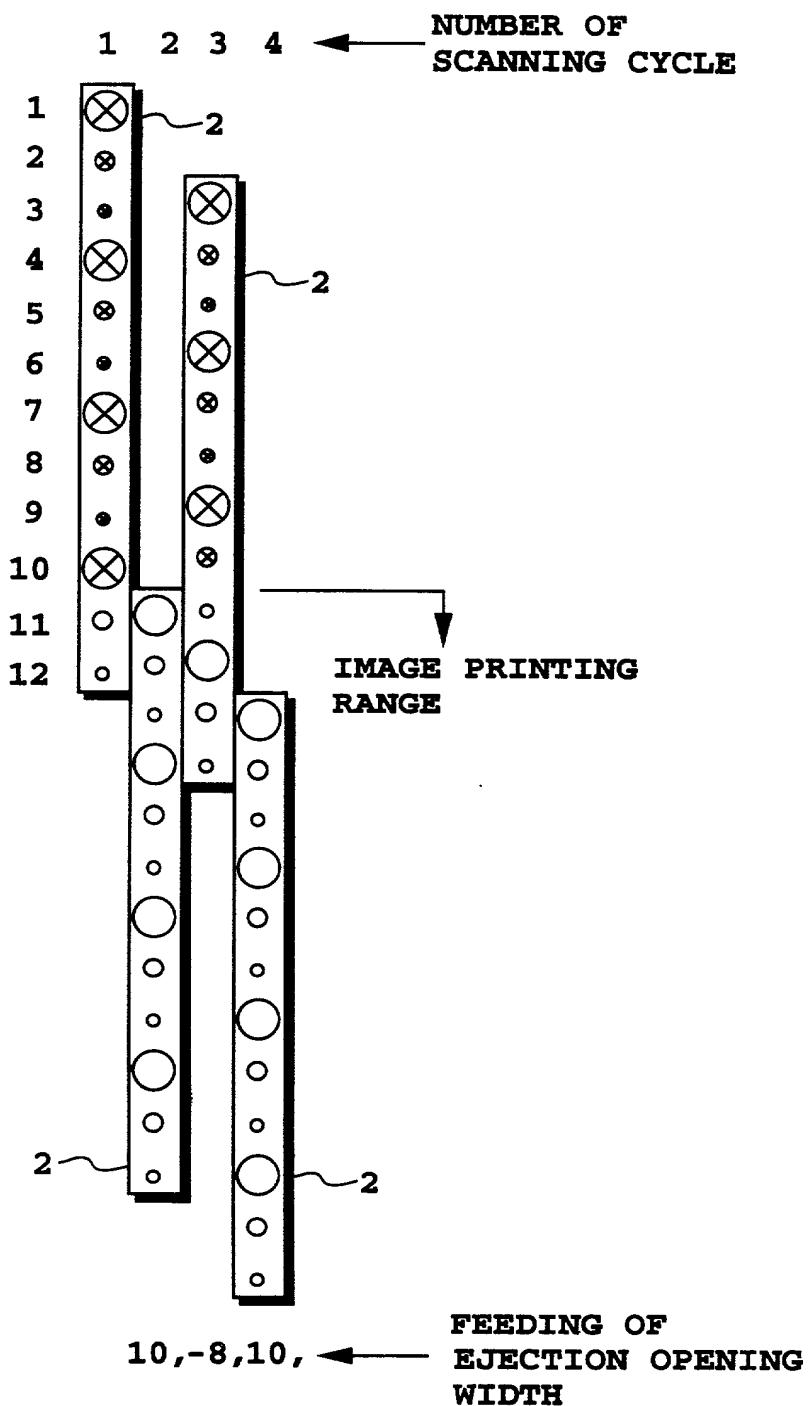


**FIG.53**



*FIG.54*

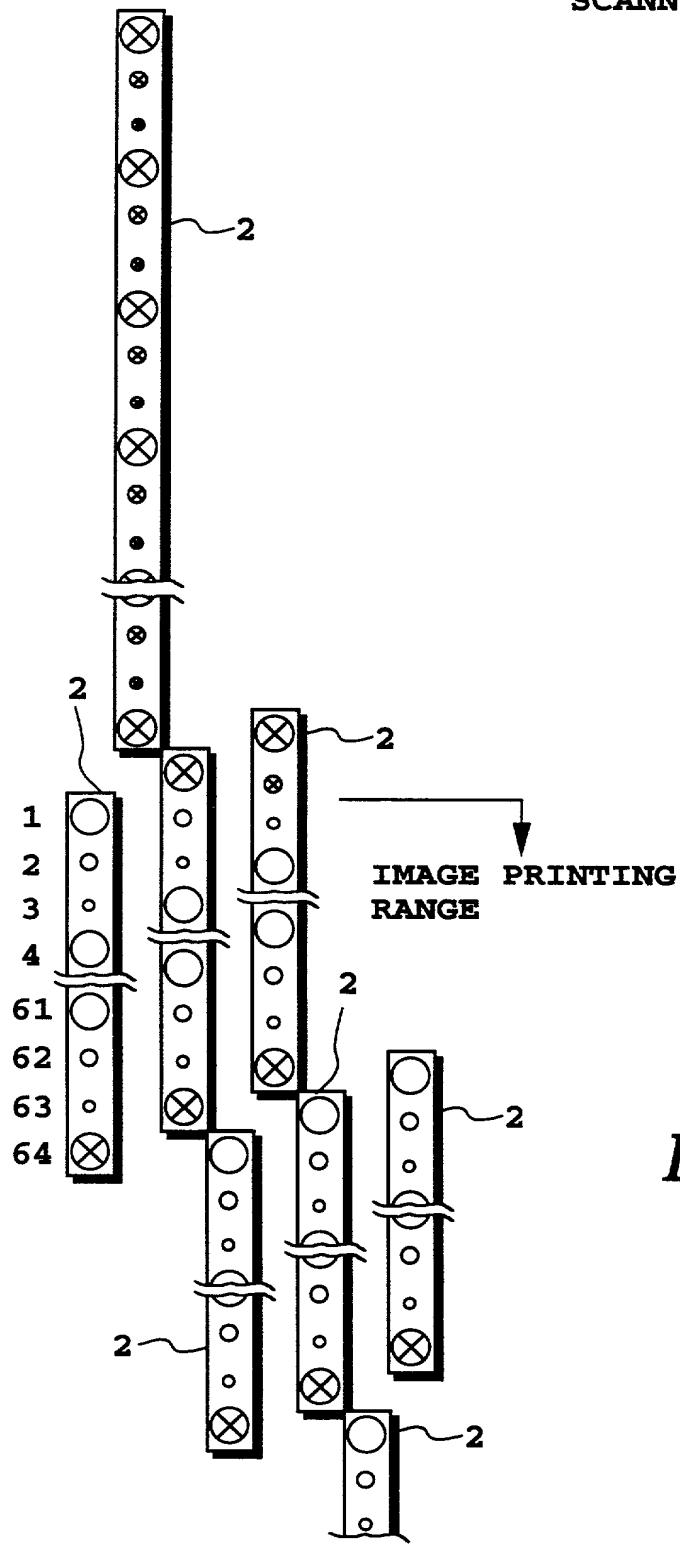
70/81



*FIG.55*

71/81

1 2 3 4 5 6 7 8 ← NUMBER OF SCANNING CYCLE



**FIG.56**

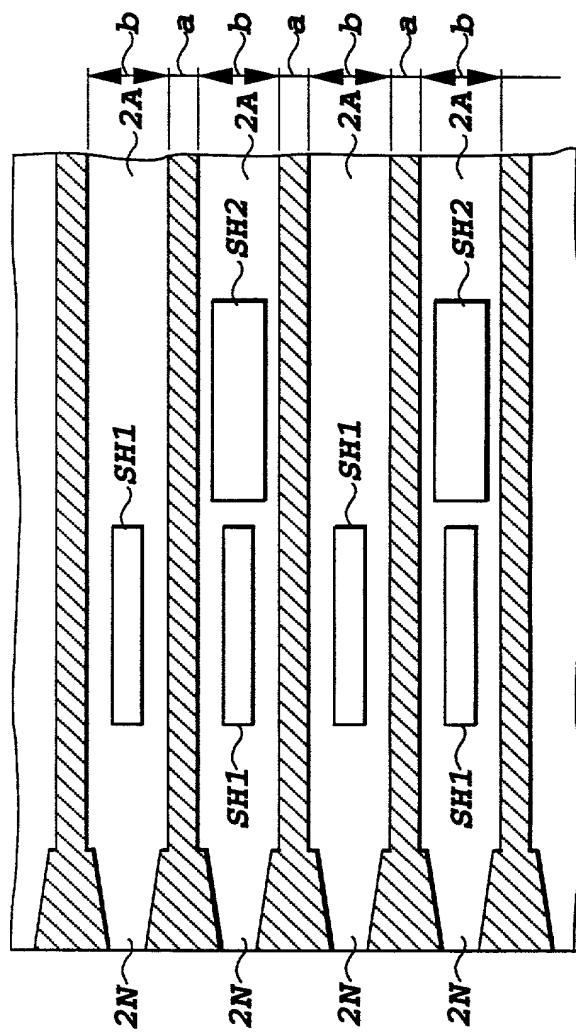
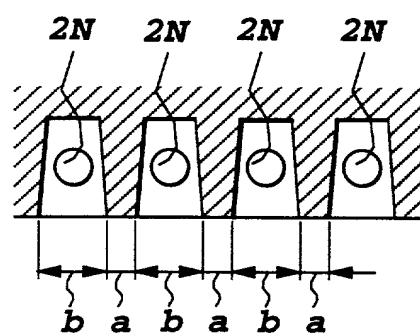


FIG. 57A



**FIG. 57B**

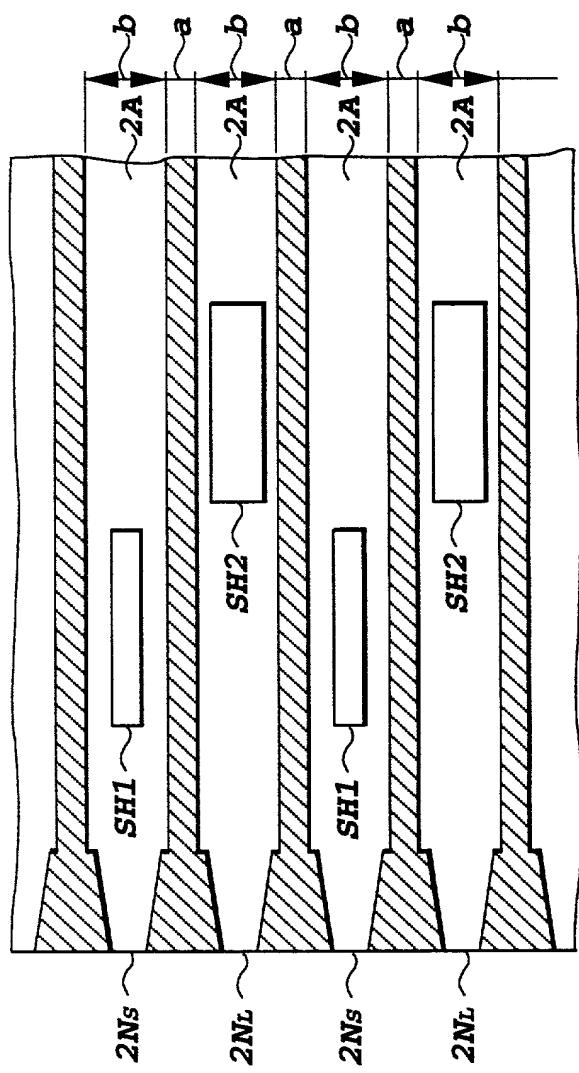
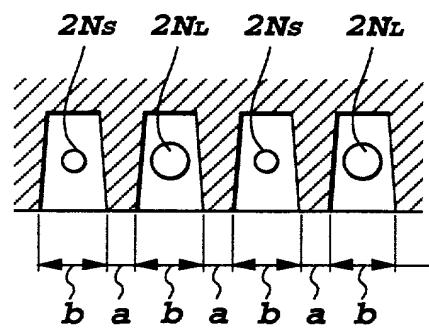


FIG. 58A



**FIG. 58B**

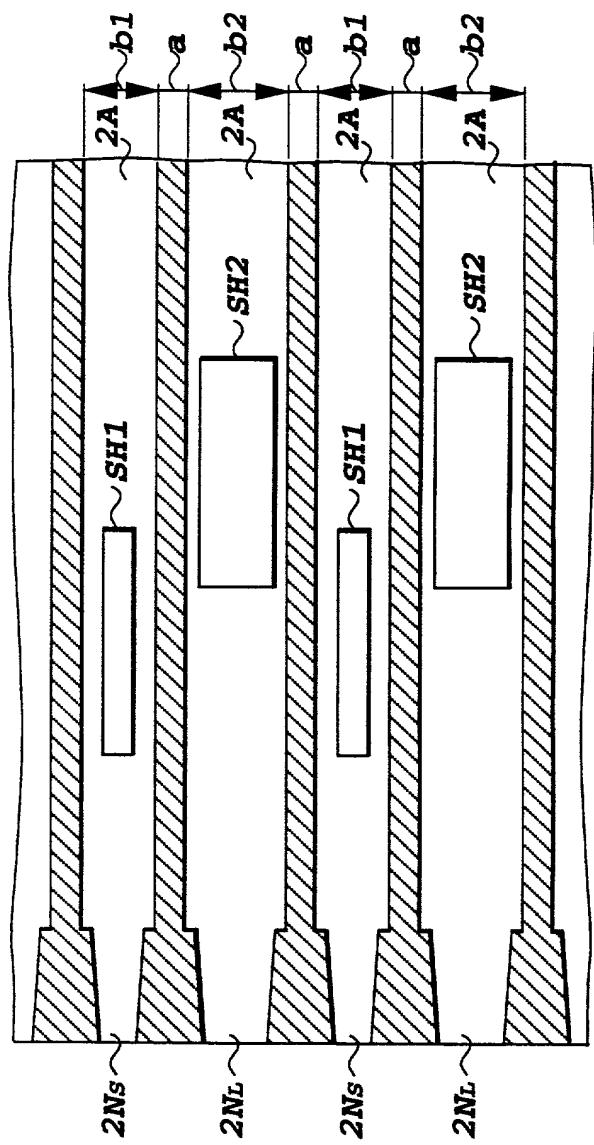
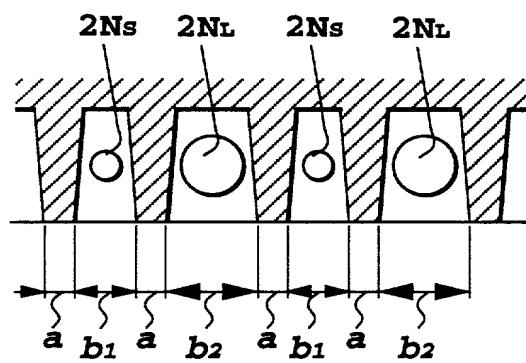


FIG. 59A



**FIG.59B**

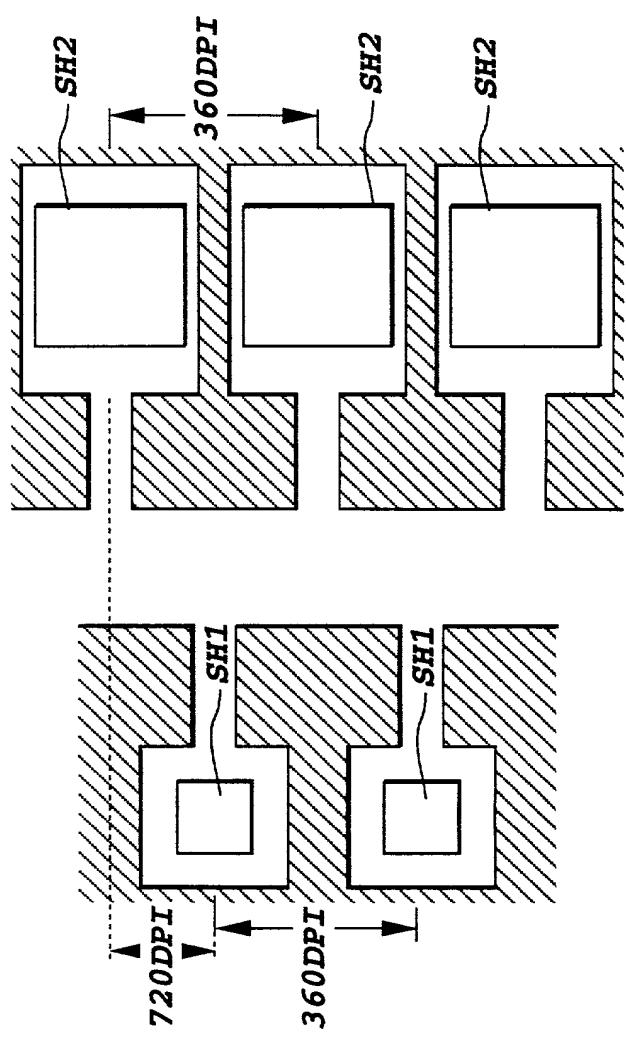
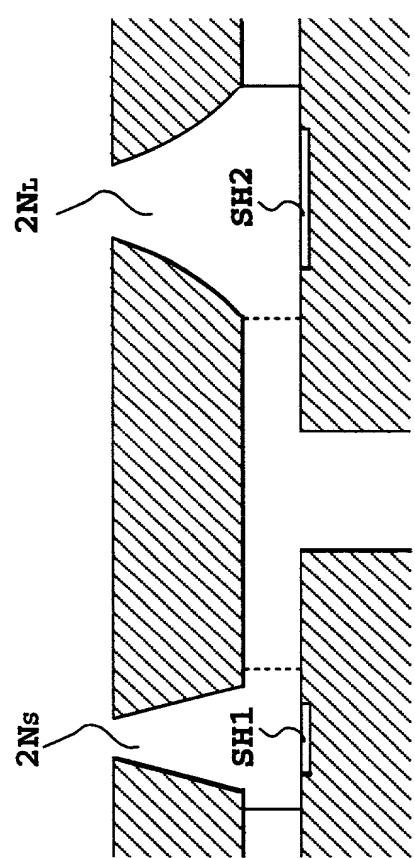


FIG. 60A



**FIG. 60B**

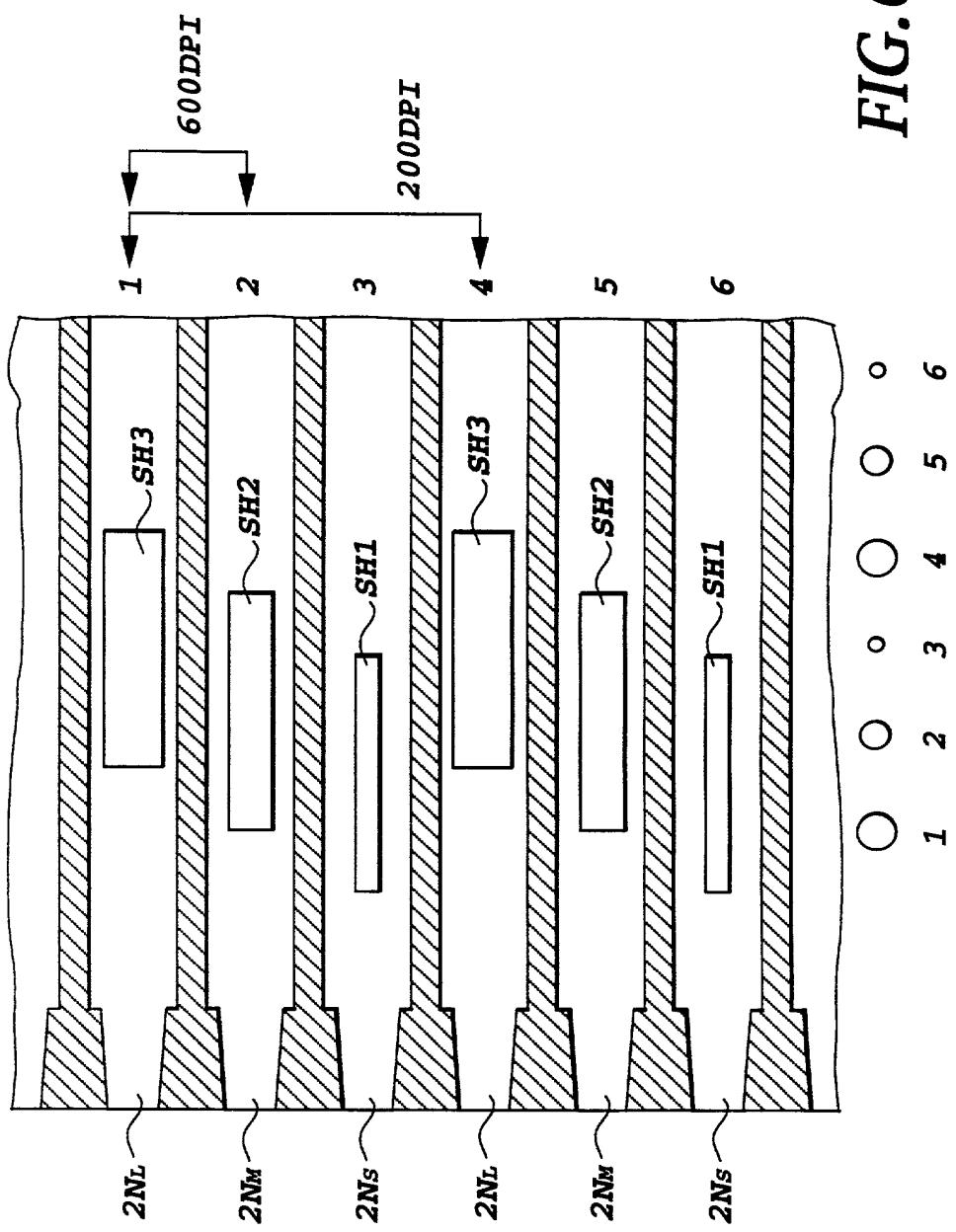
**FIG.61**

FIG. 62

